

FIG. 1

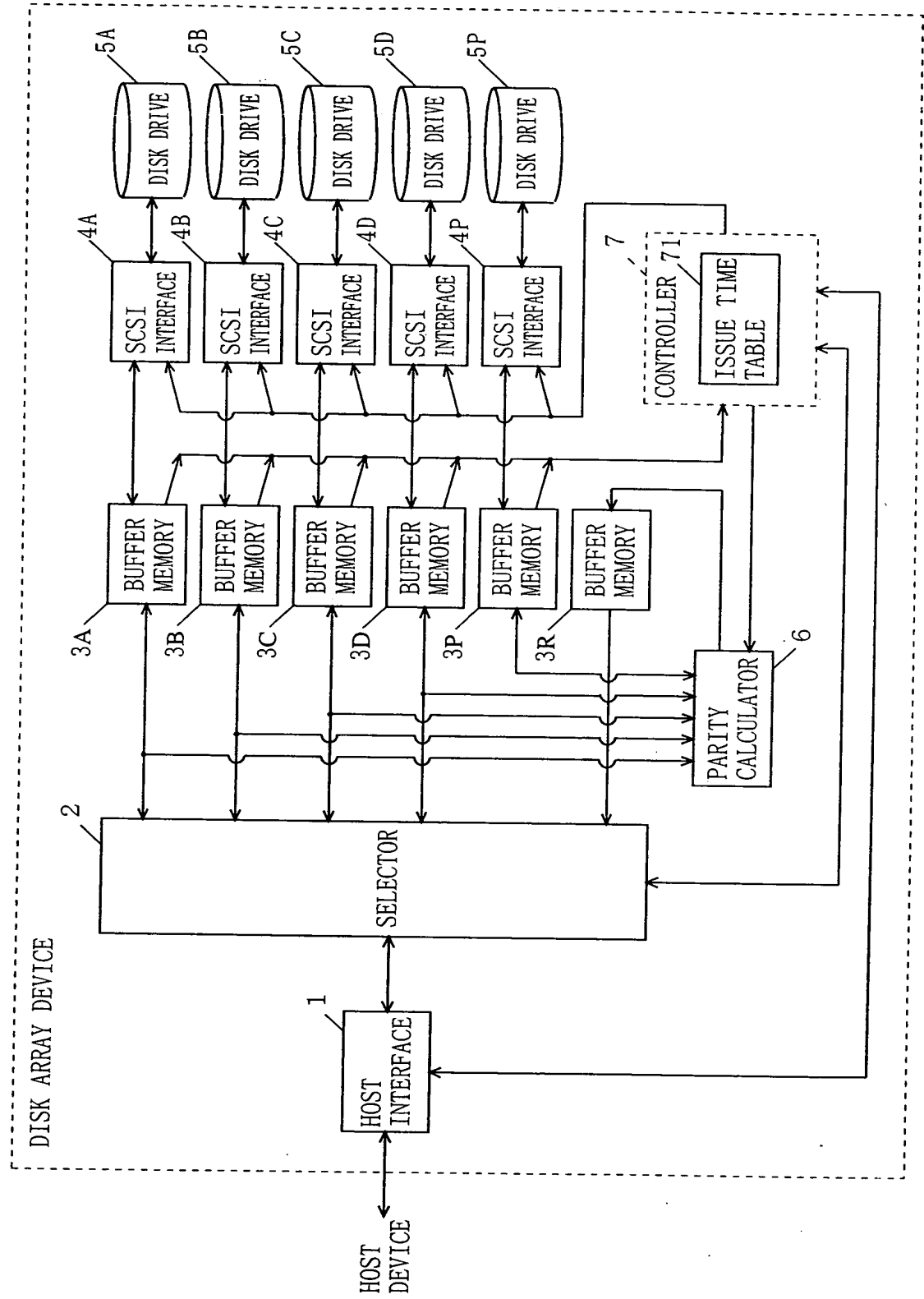


FIG. 2

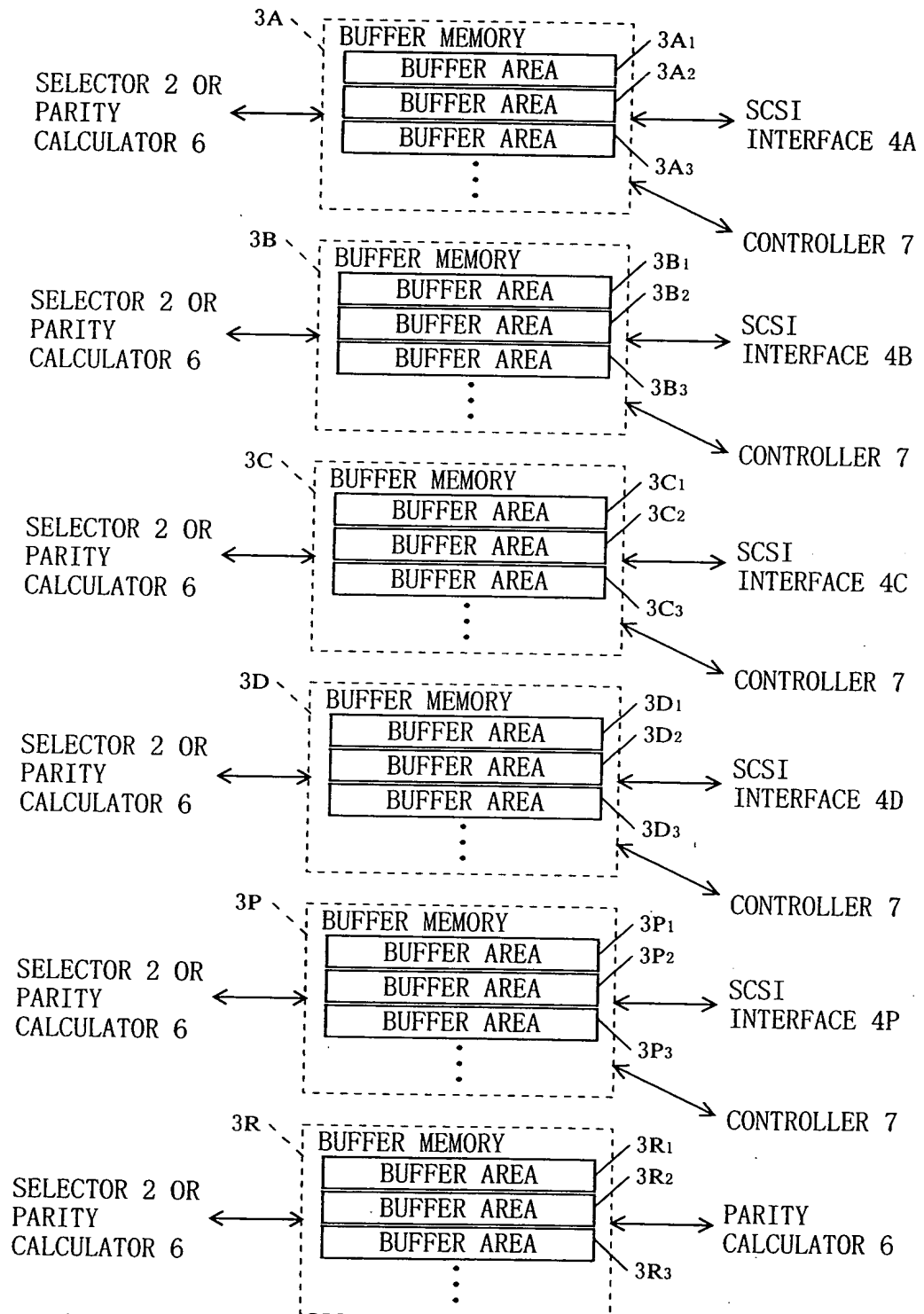


FIG. 3 a

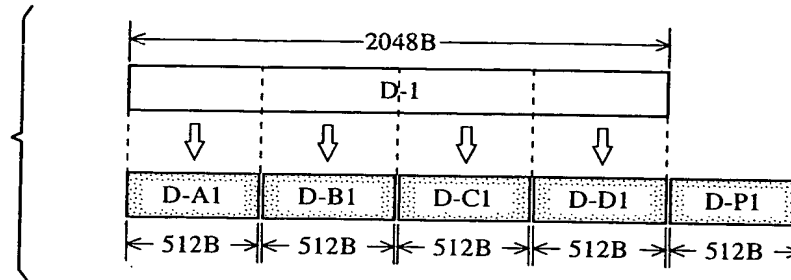


FIG. 3 b

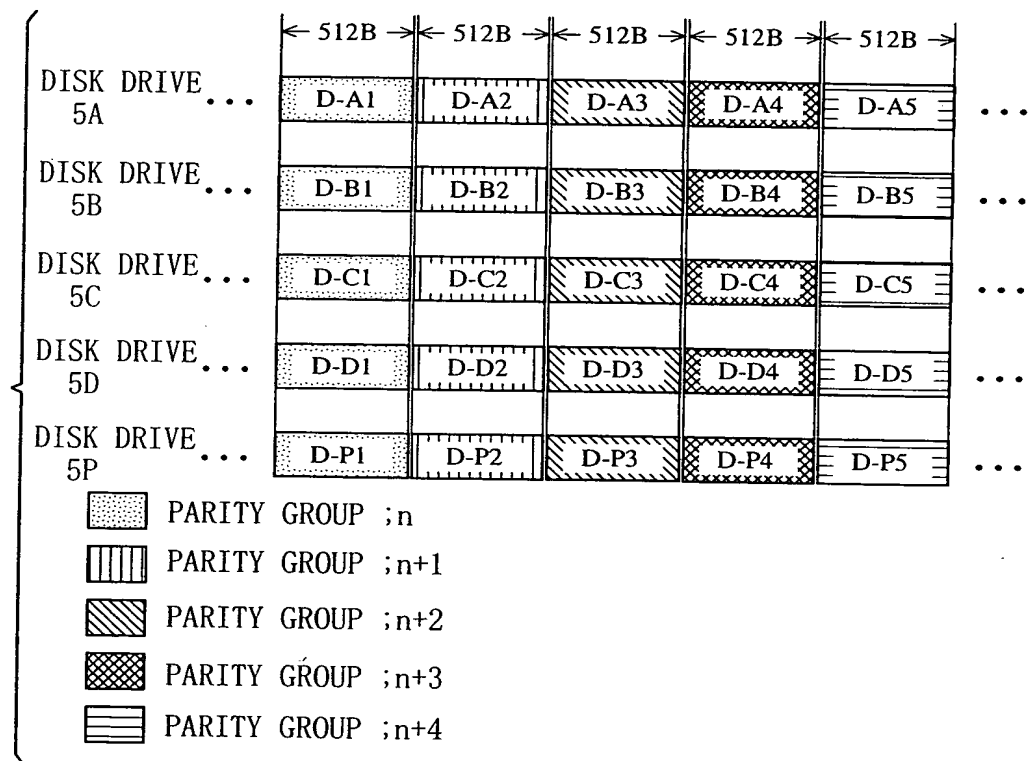


FIG. 4 a

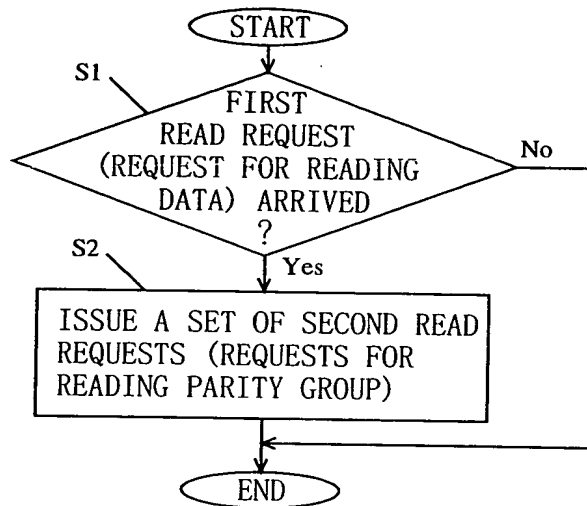


FIG. 4 b

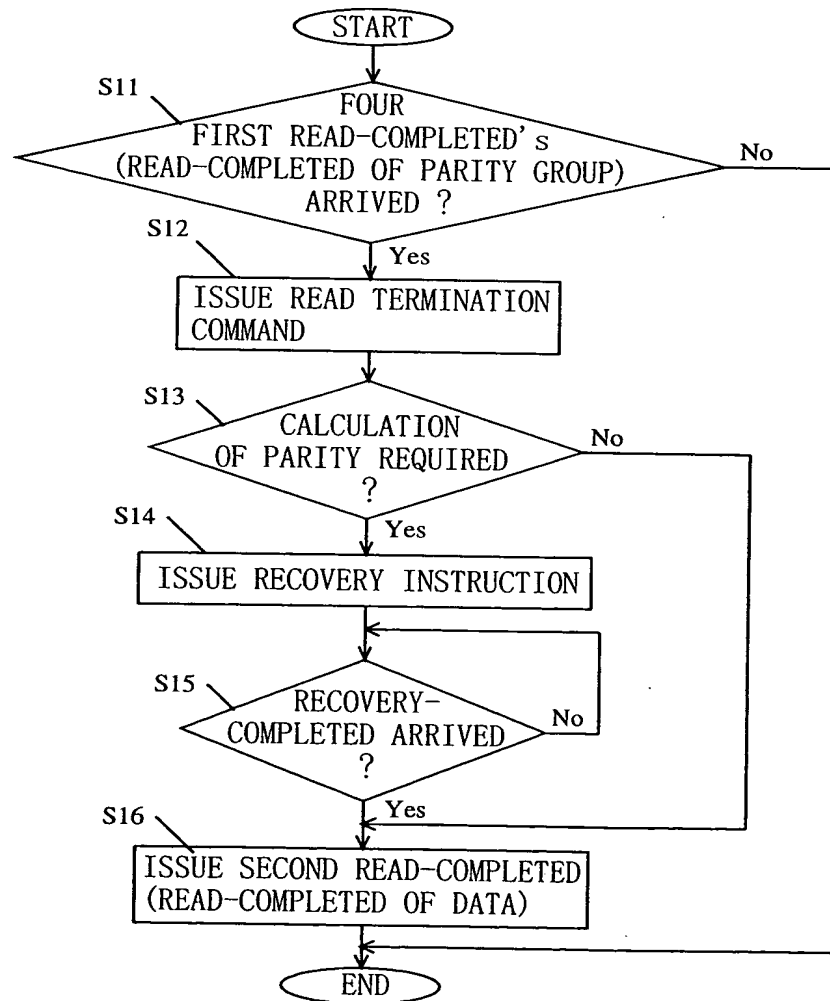


FIG. 5 a

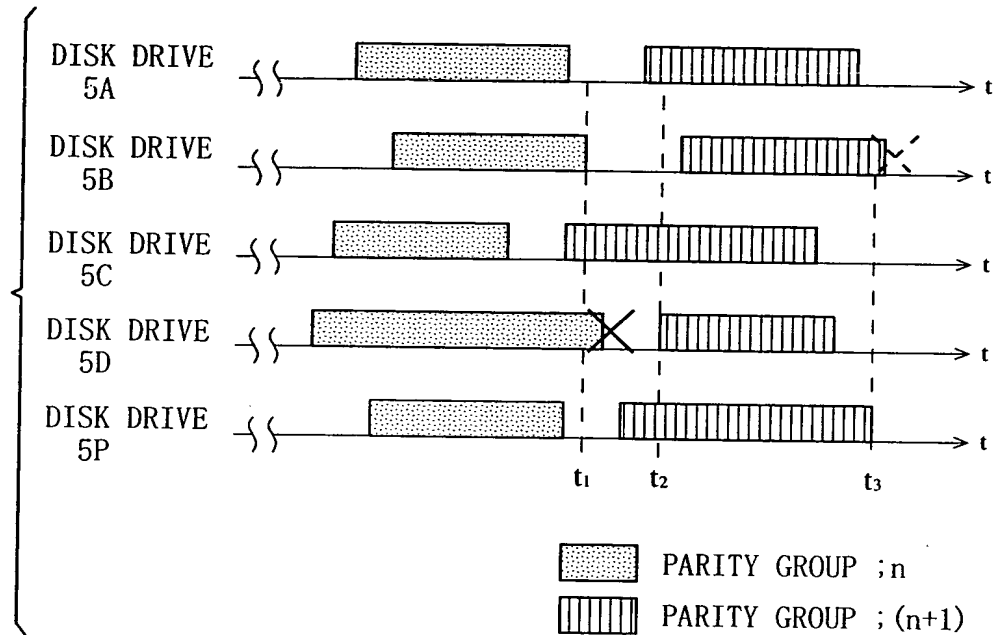
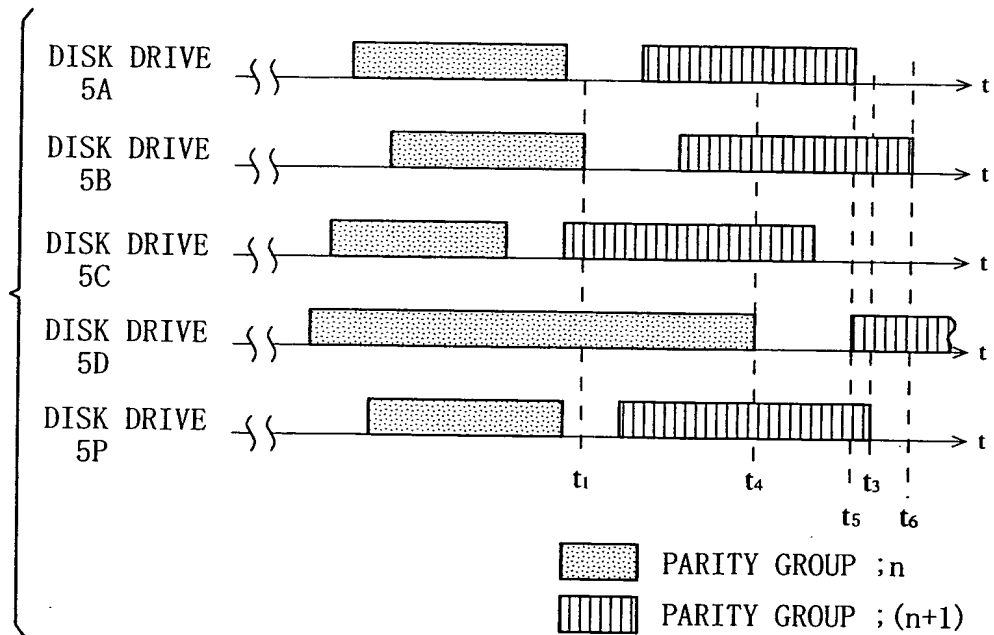
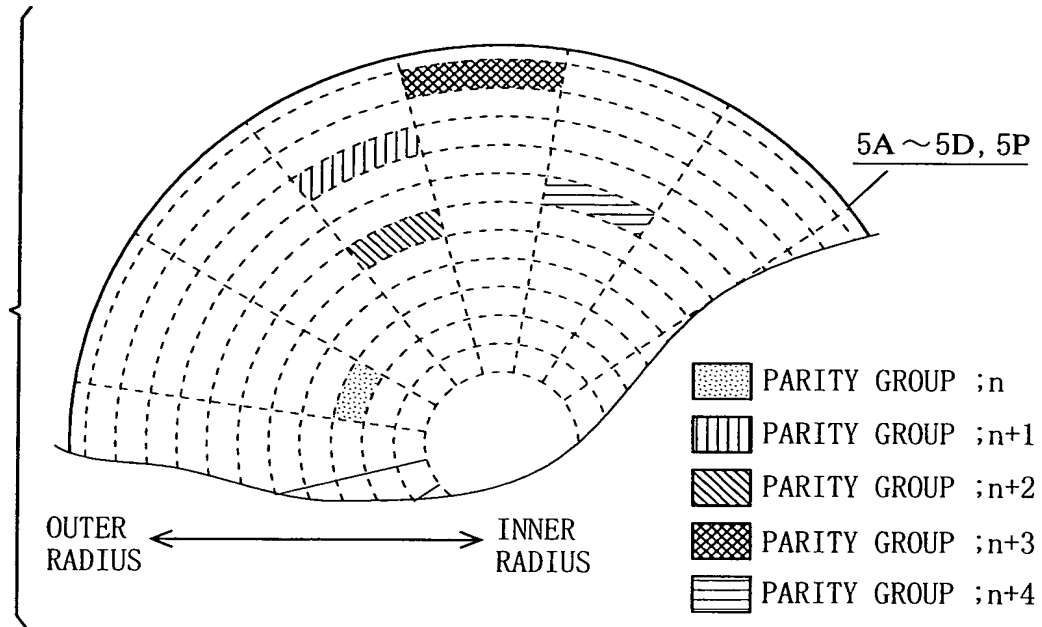


FIG. 5 b



F I G. 6 a



F I G. 6 b

ORDER OF SECOND READ REQUESTS	「n」 → 「n+1」 → 「n+2」 → 「n+3」 → 「n+4」
READING ORDER	「n」 → 「n+2」 → 「n+4」 → 「n+1」 → 「n+3」

FIG. 7 a

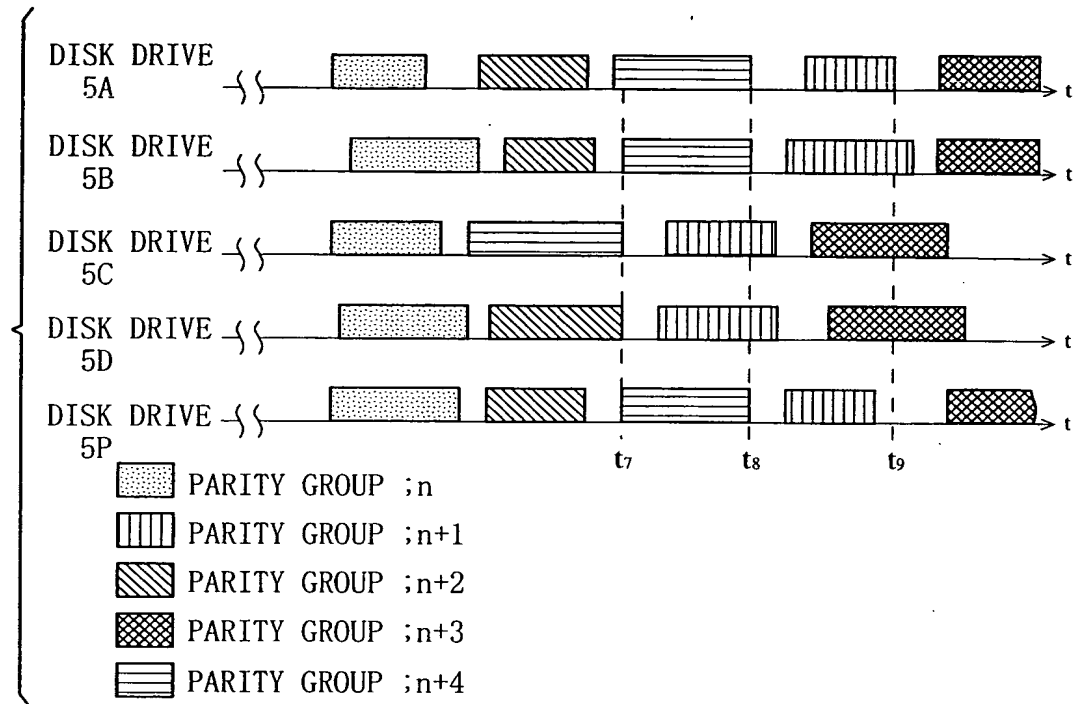


FIG. 7 b

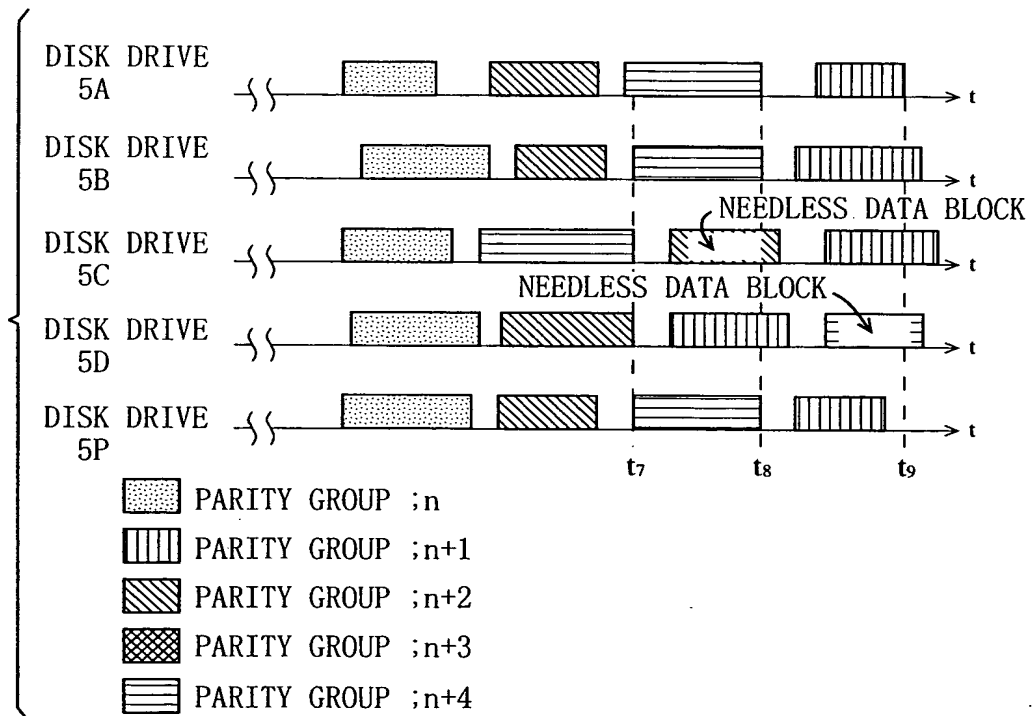


FIG. 8 a

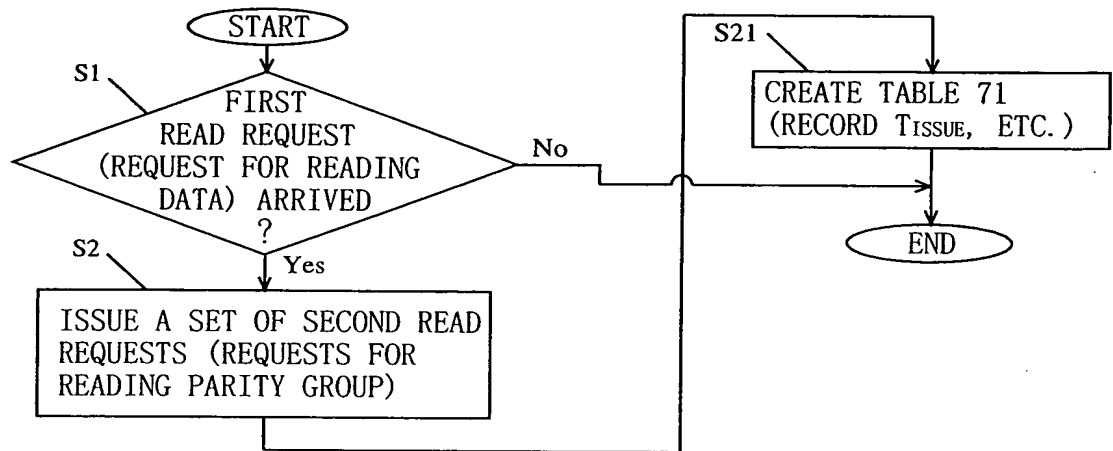
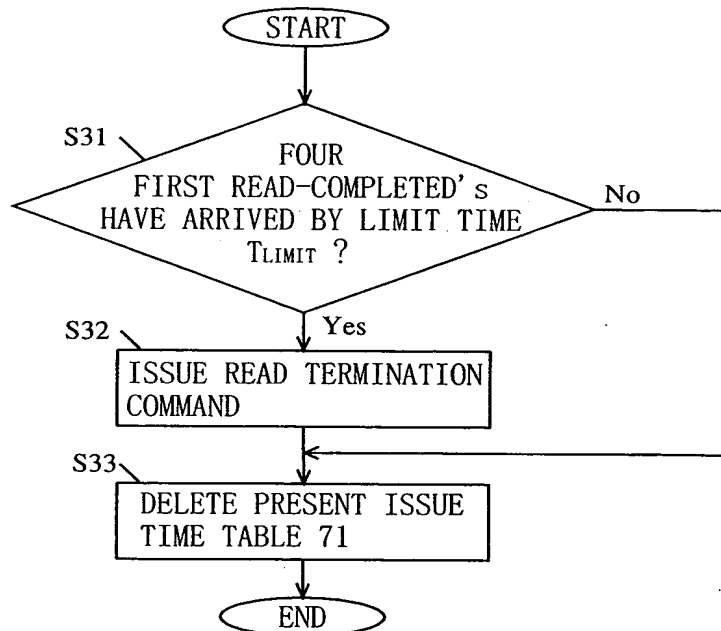


FIG. 8 b



F I G. 9

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ISSUE TIME t_{ISSUE}	BUFFER AREA

FIG. 10 a

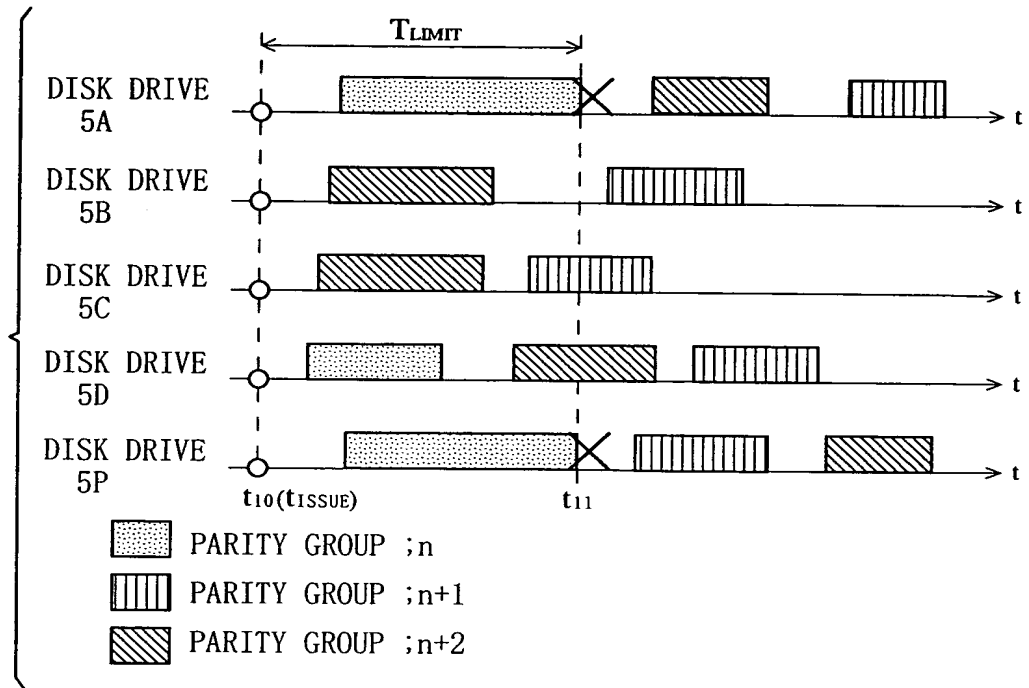


FIG. 10 b

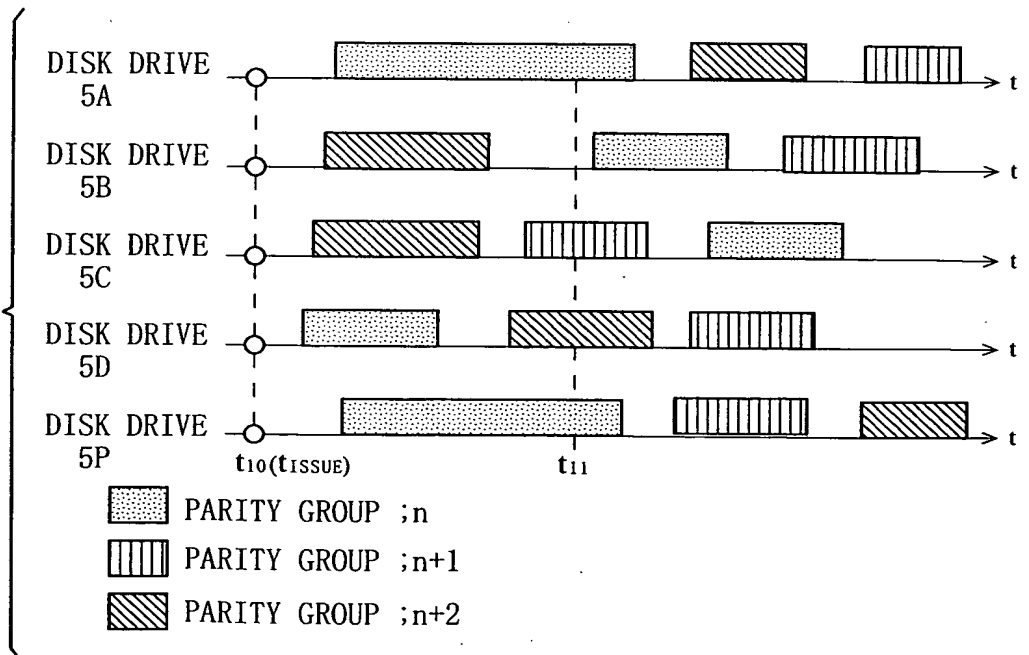


FIG. 11

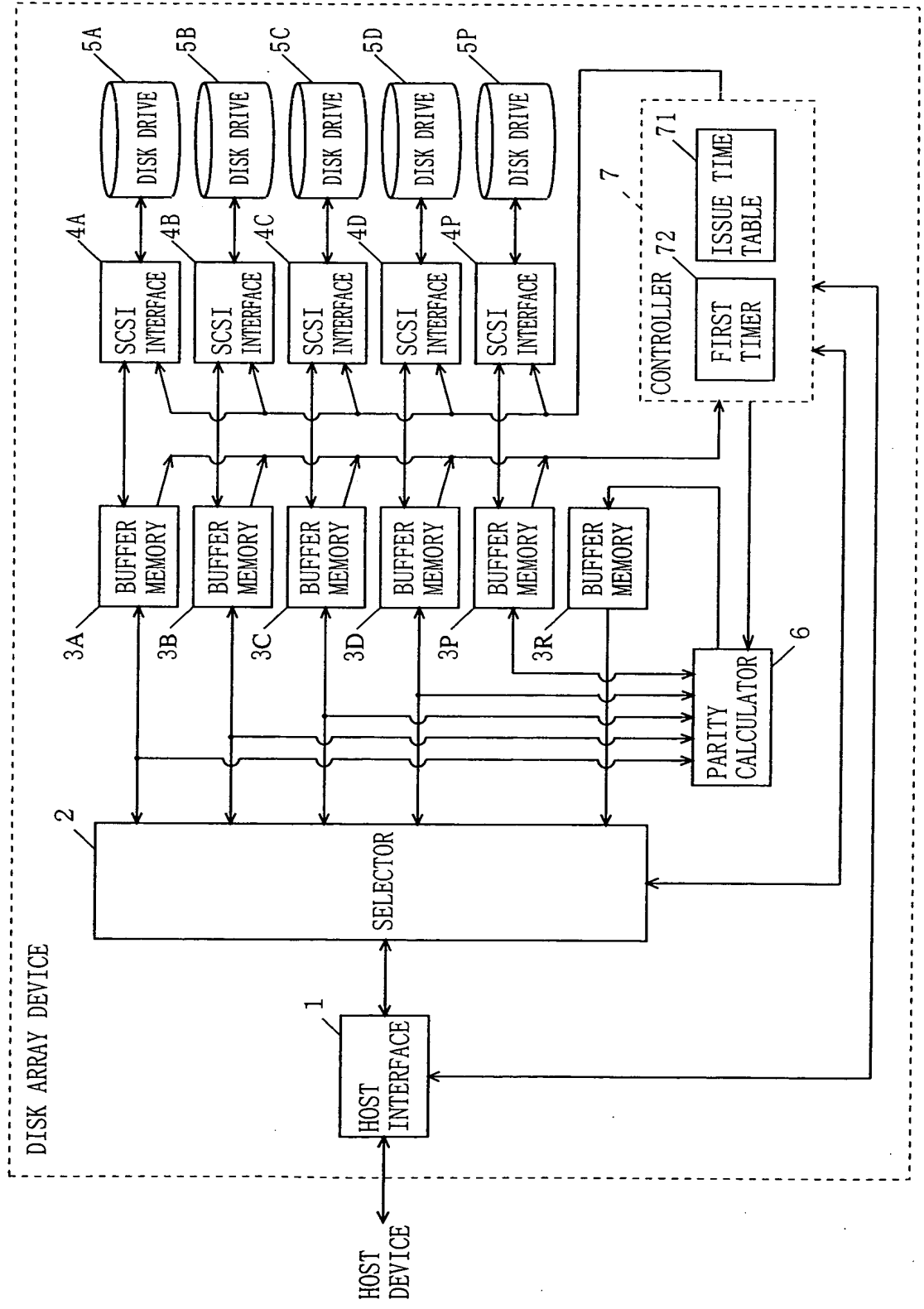


FIG. 12a

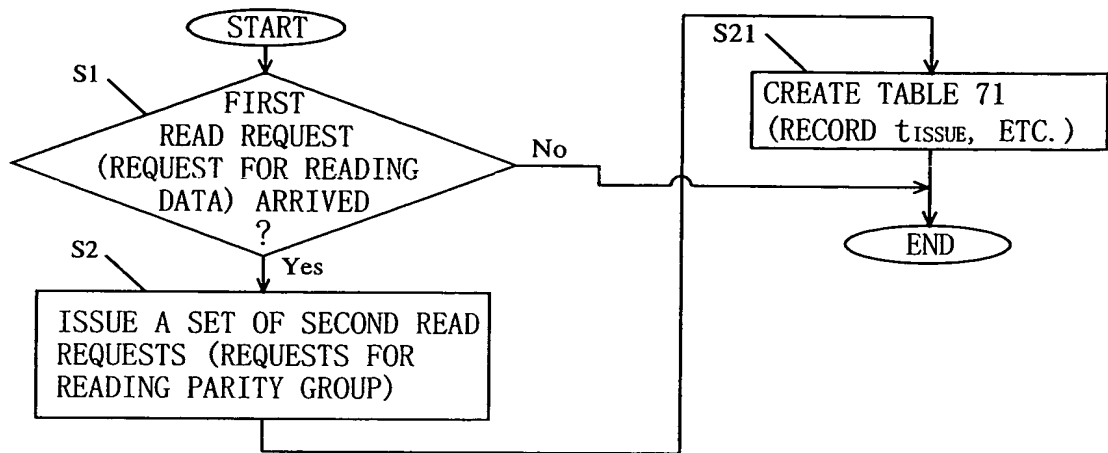
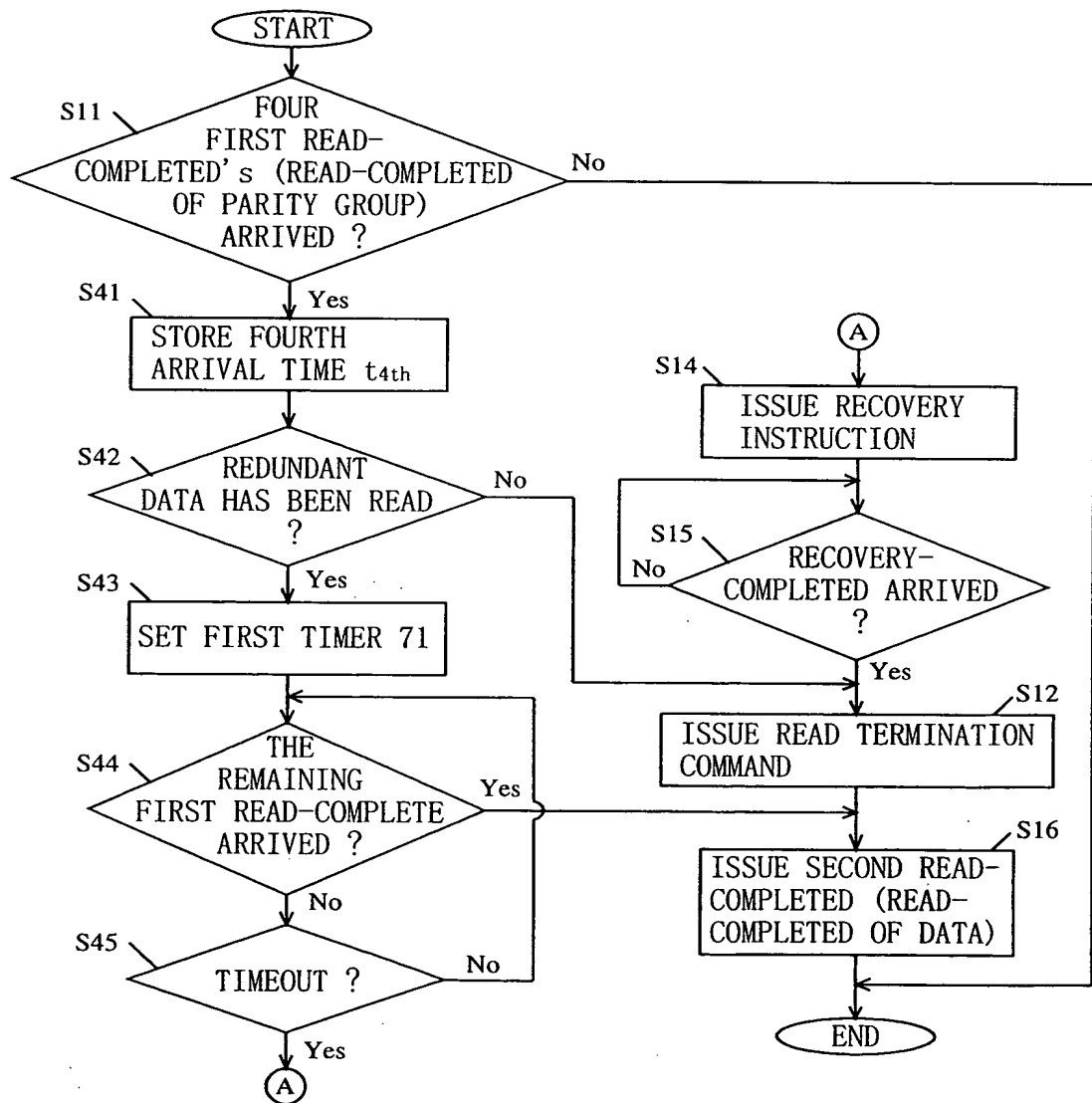


FIG. 12b



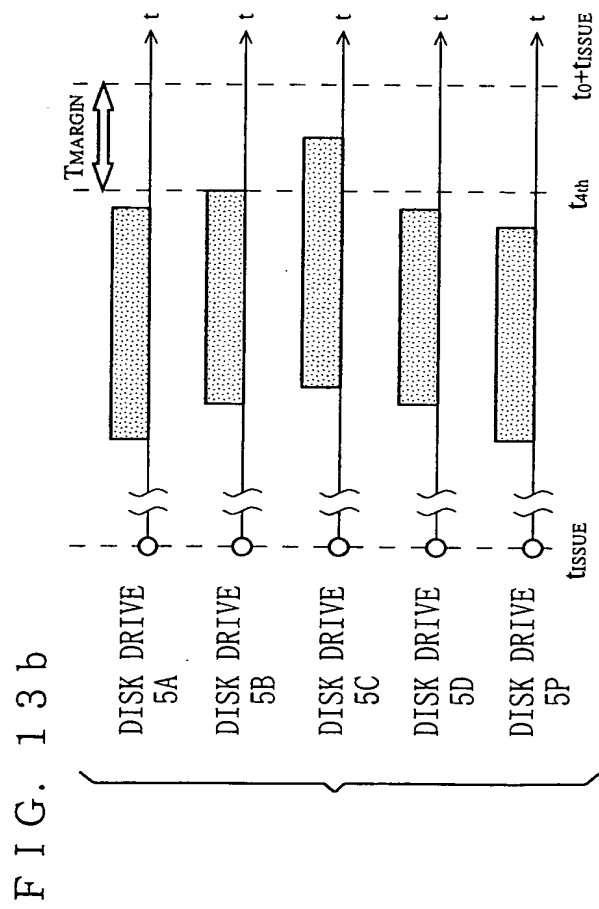
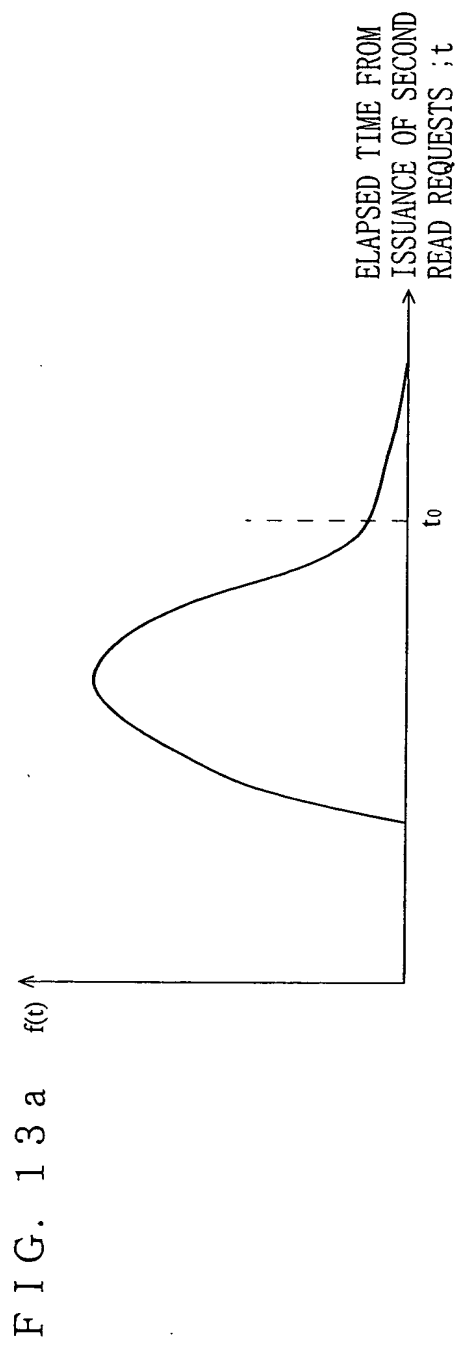


FIG. 14 a

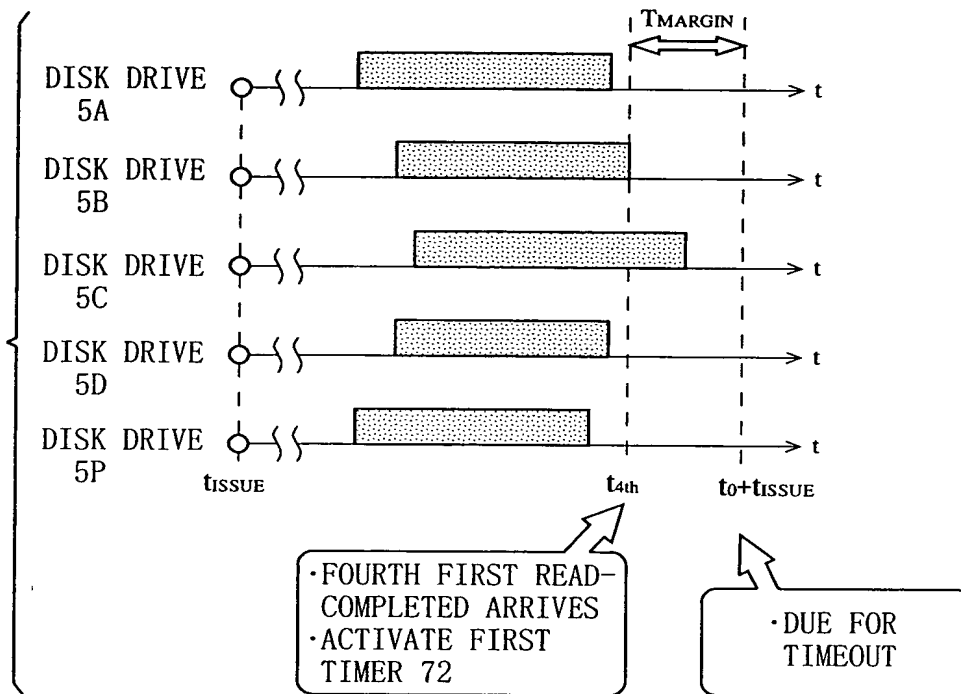


FIG. 14 b

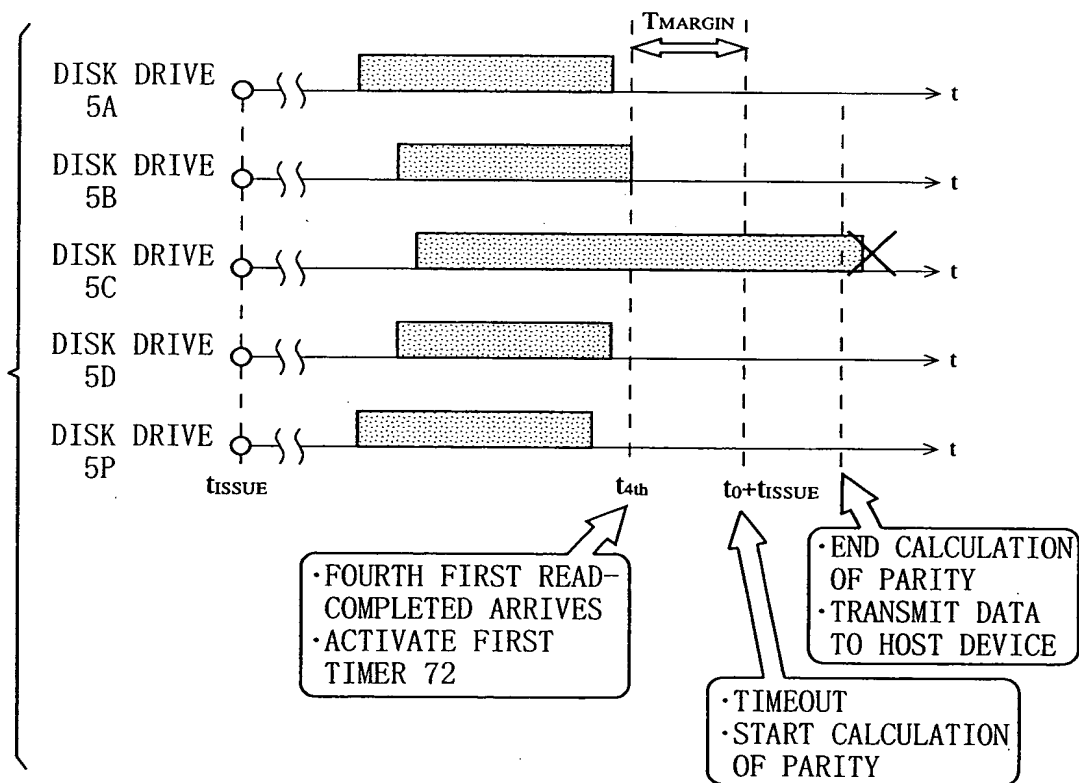


FIG. 15

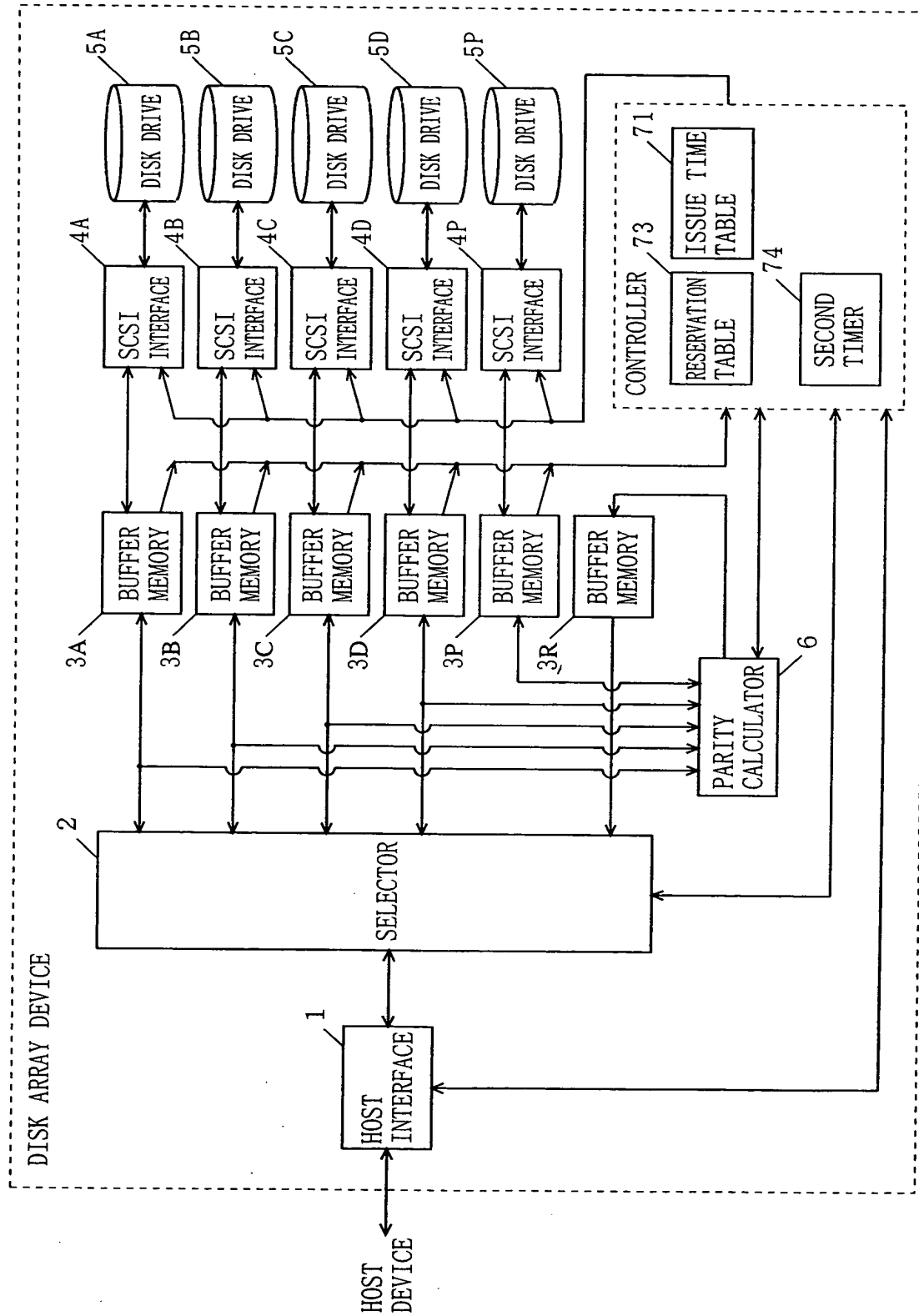
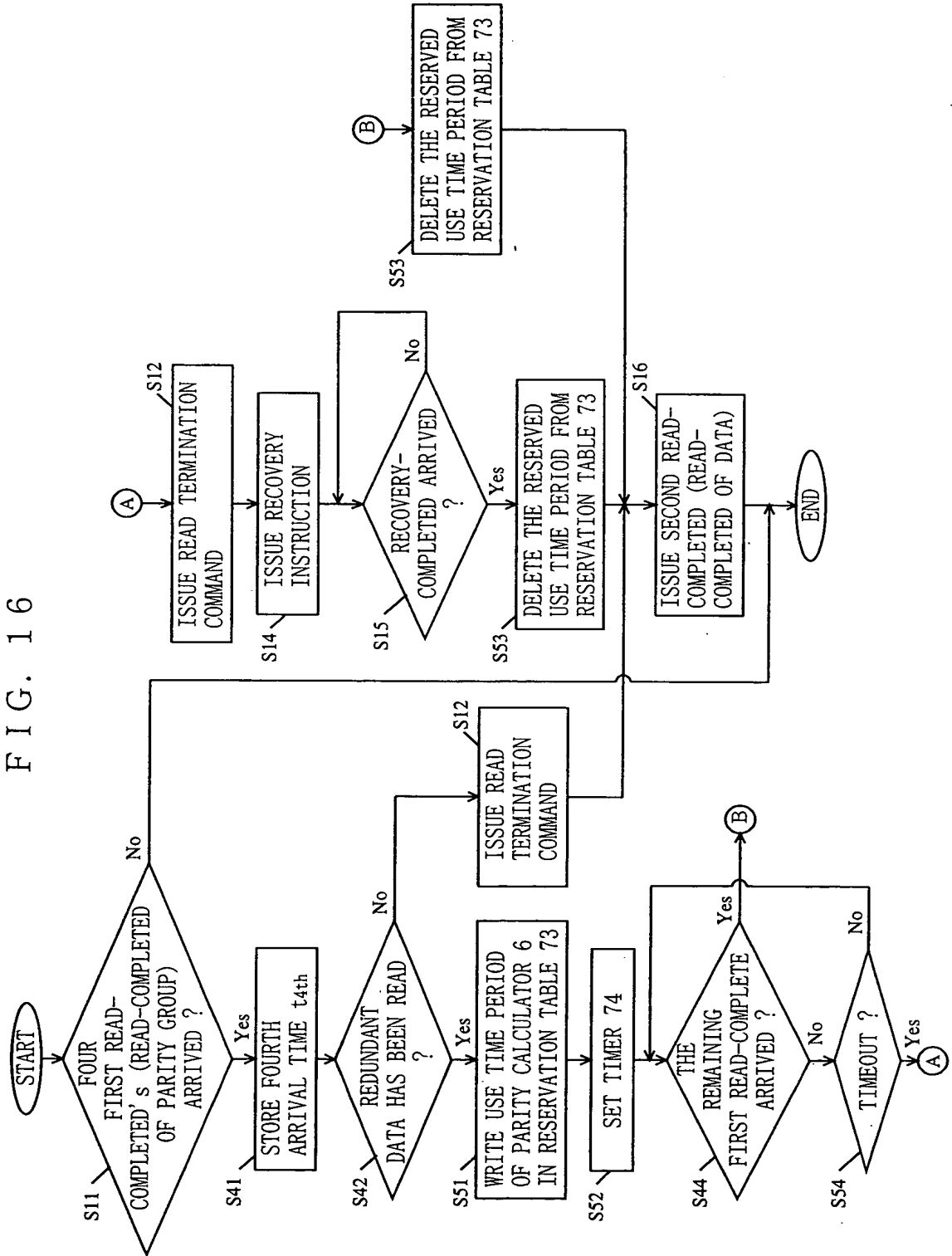


FIG. 16



F I G. 1 7

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USE TIME PERIOD	BUFFER AREA

FIG. 18

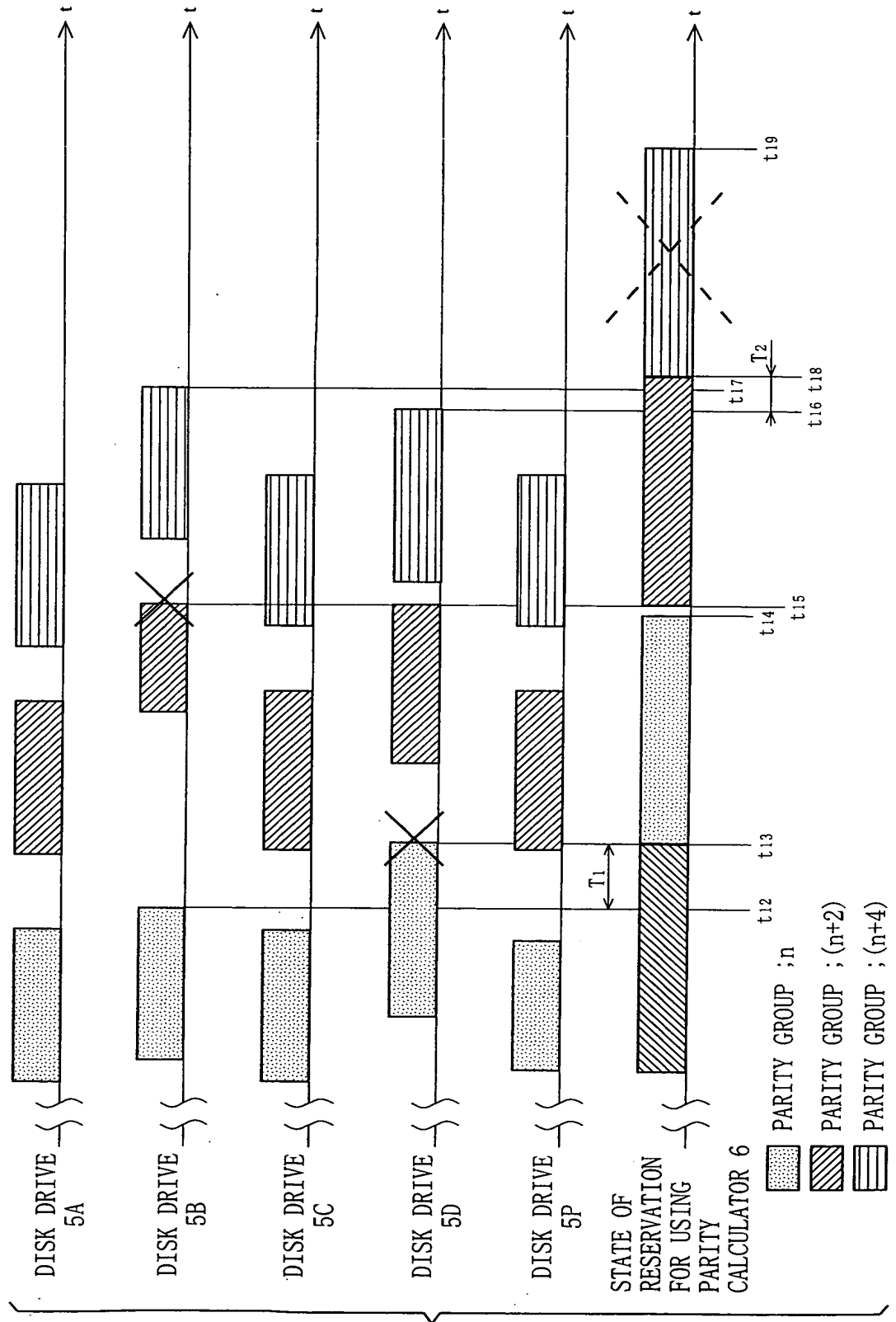


FIG. 19

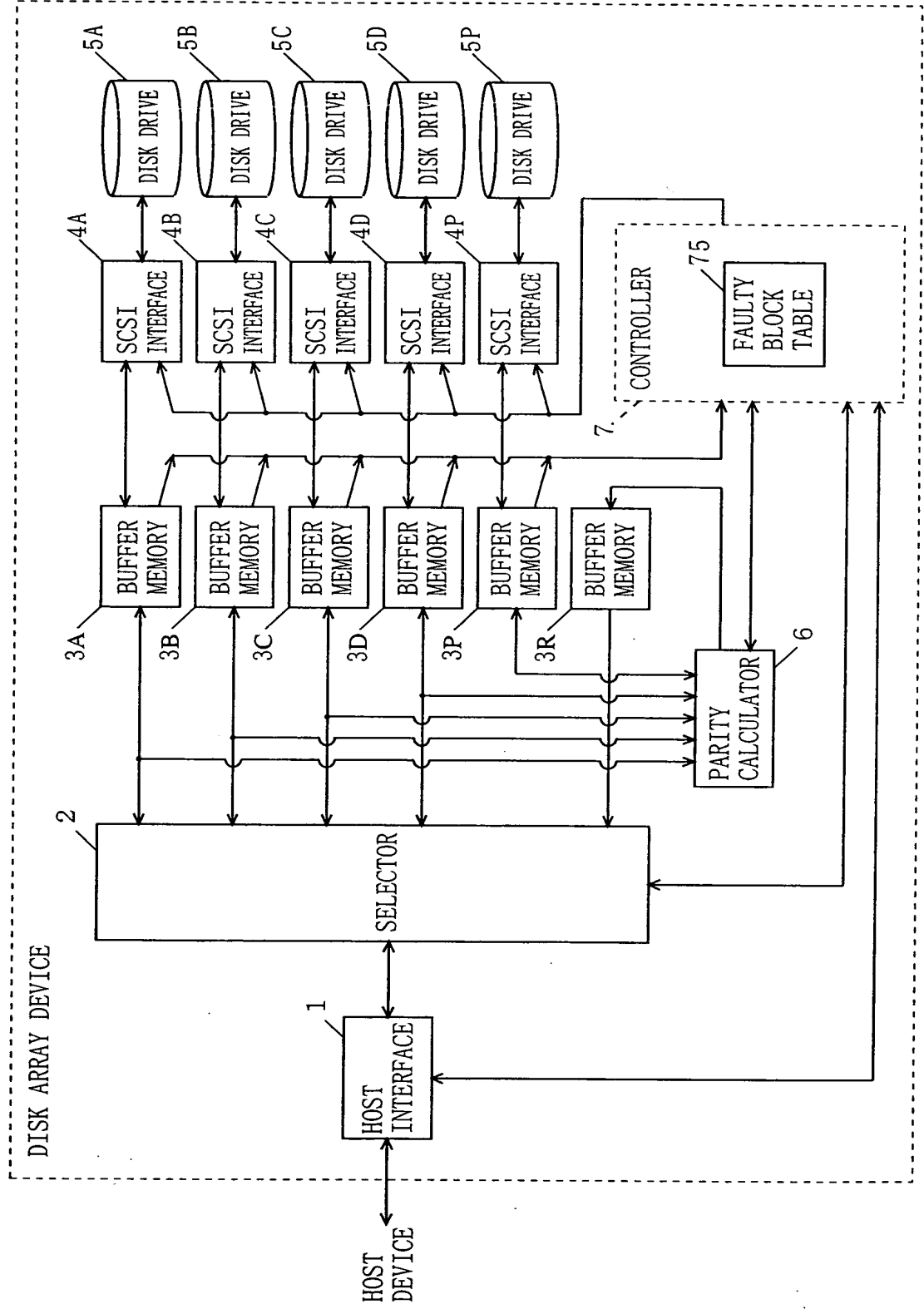


FIG. 20

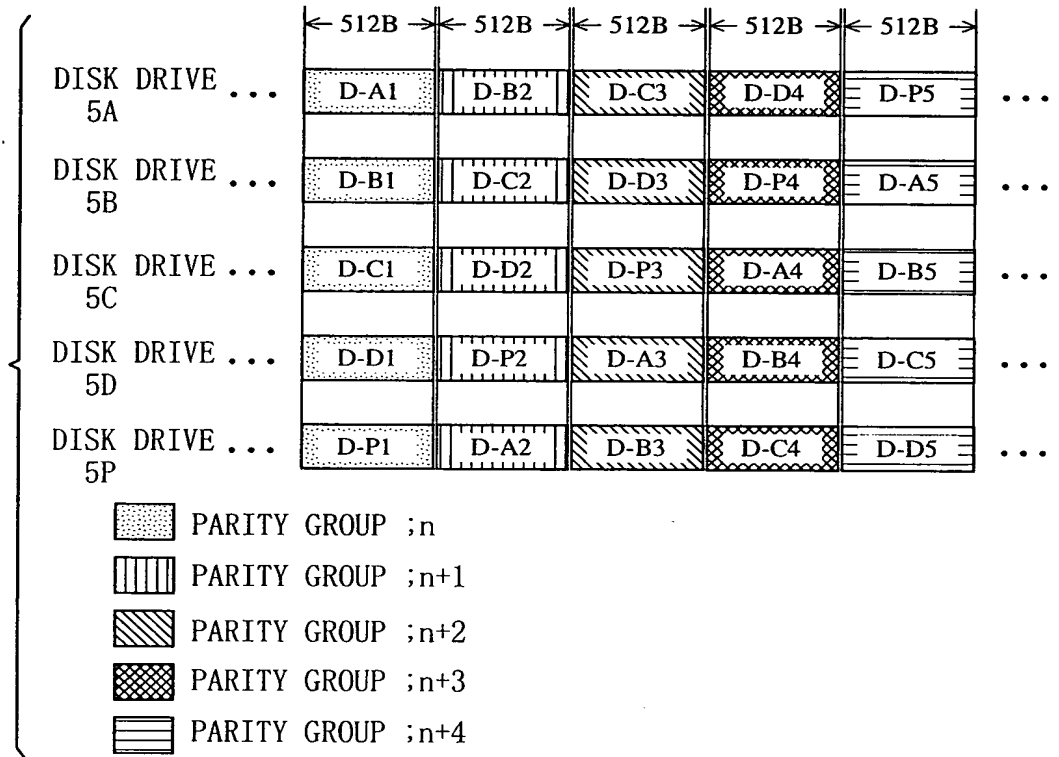


FIG. 21

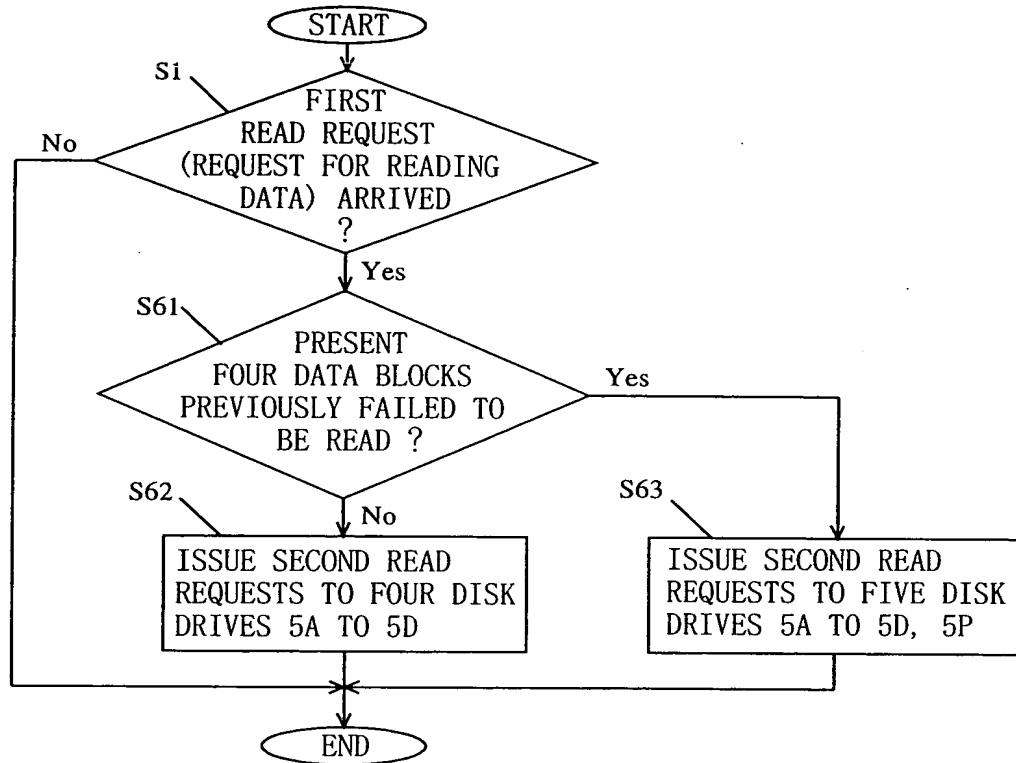


FIG. 22

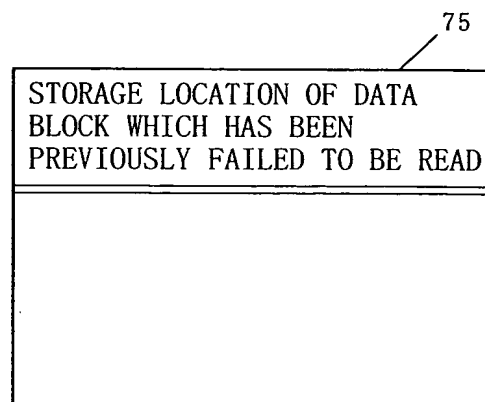


FIG. 23 a

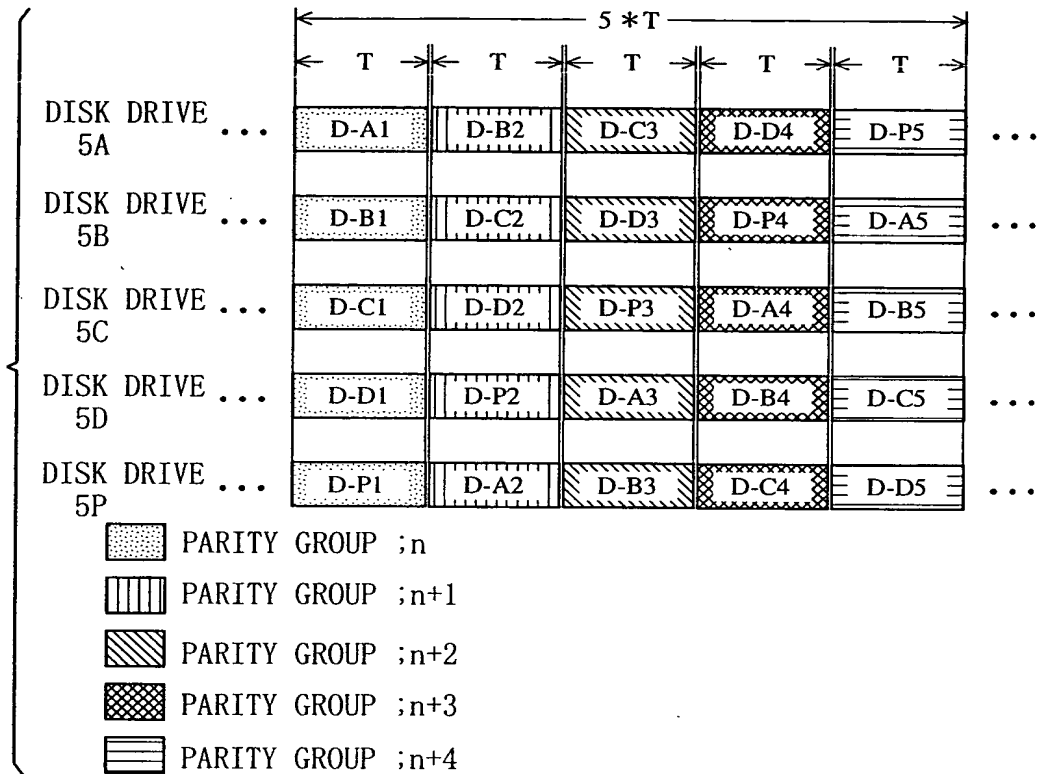


FIG. 23 b

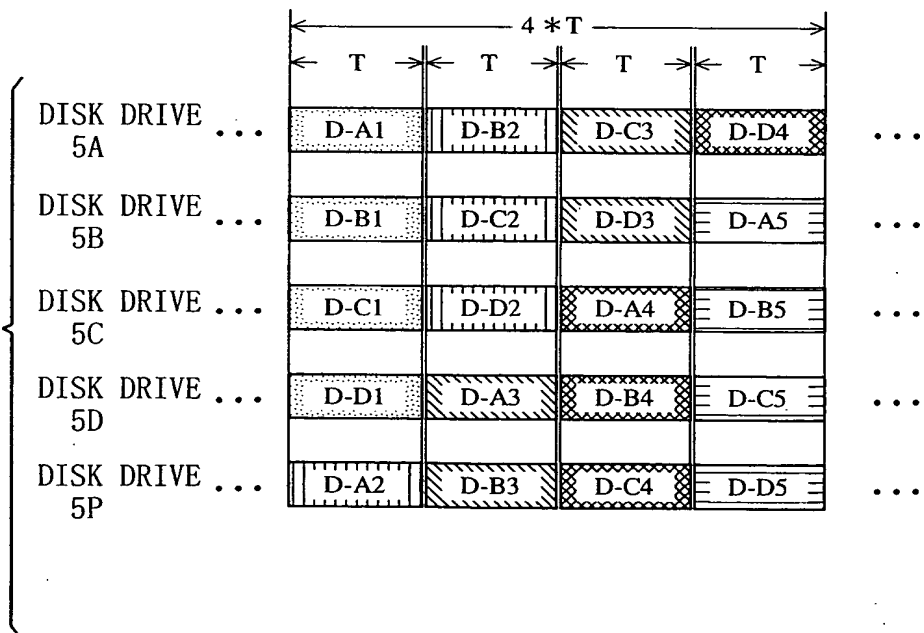


FIG. 24

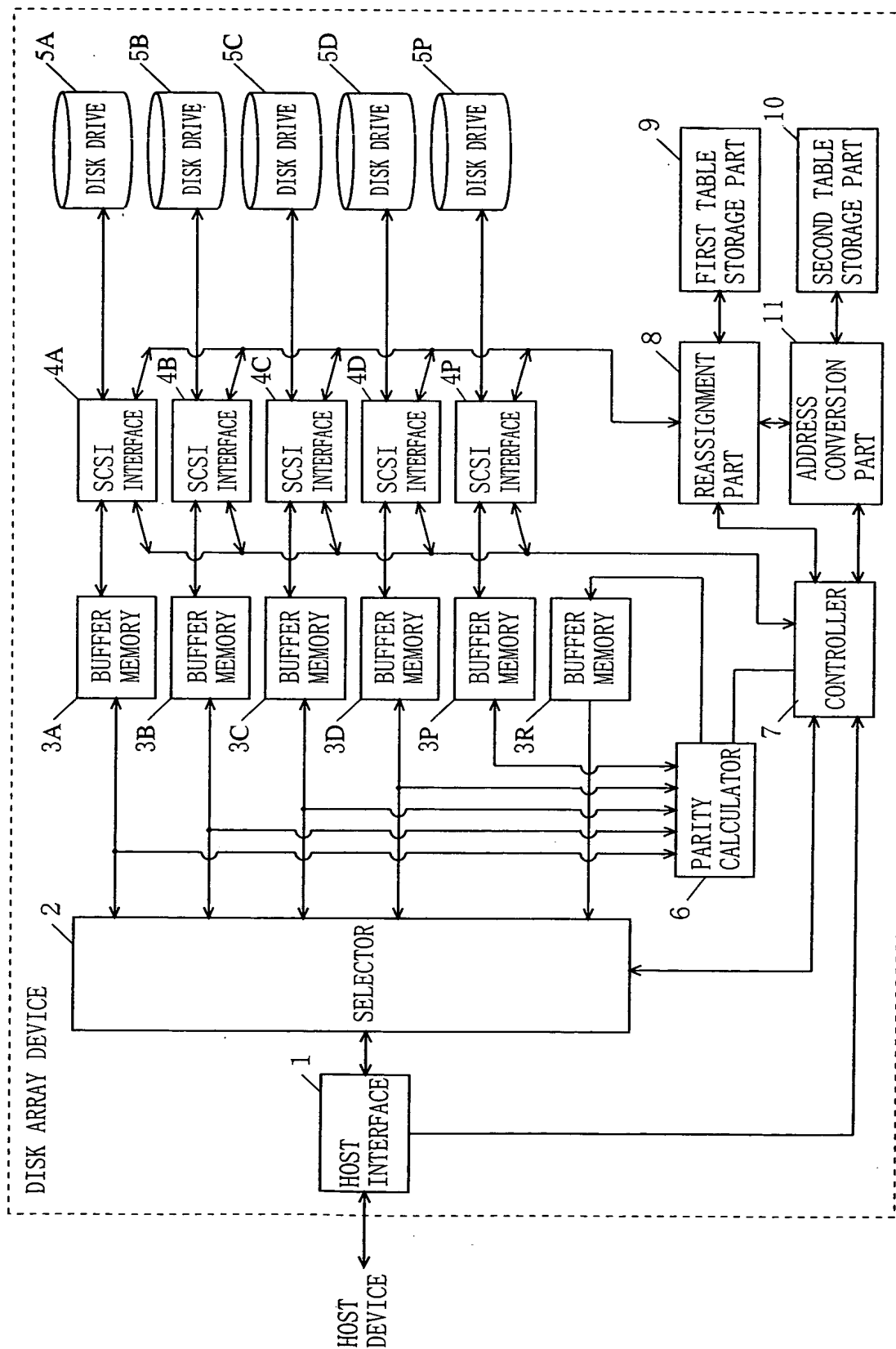


FIG. 25

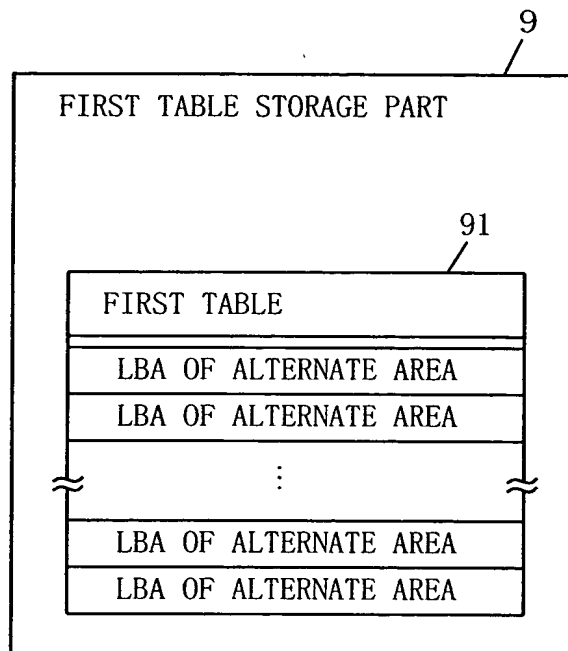


FIG. 26

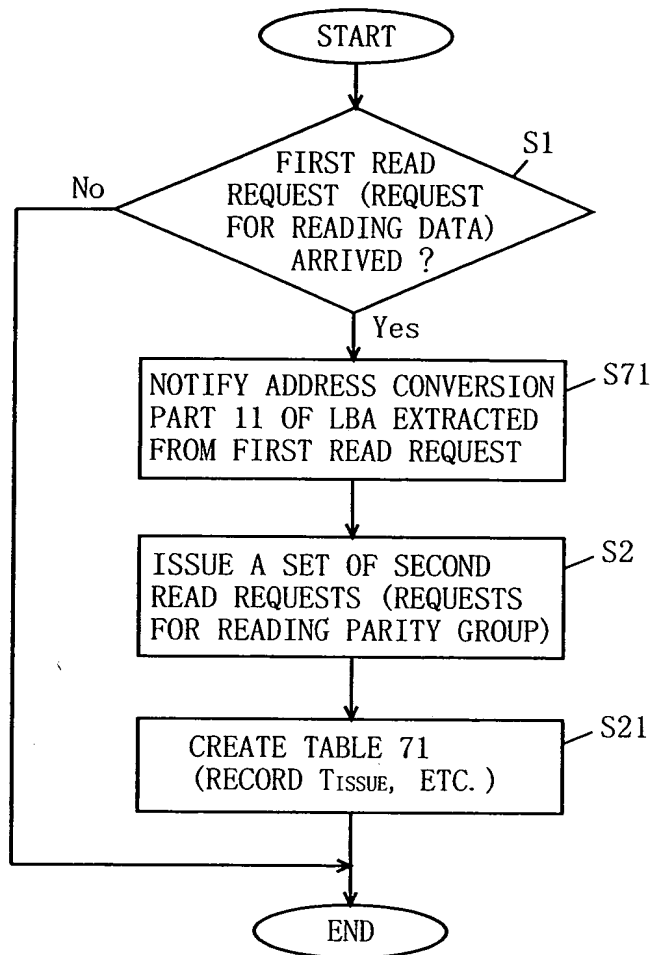


FIG. 27

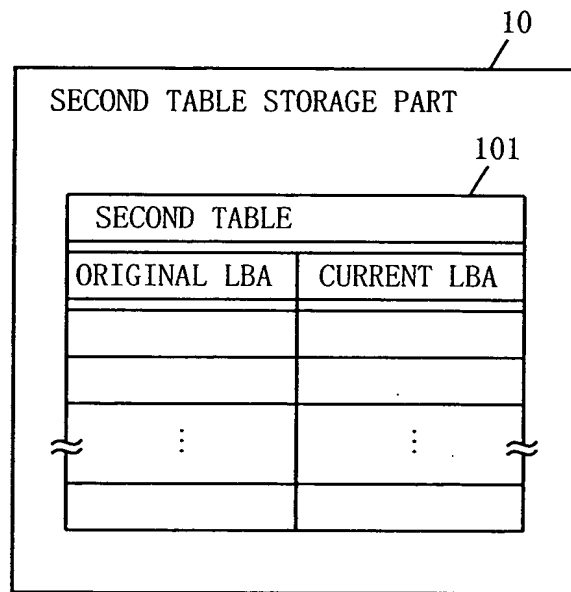


FIG. 28

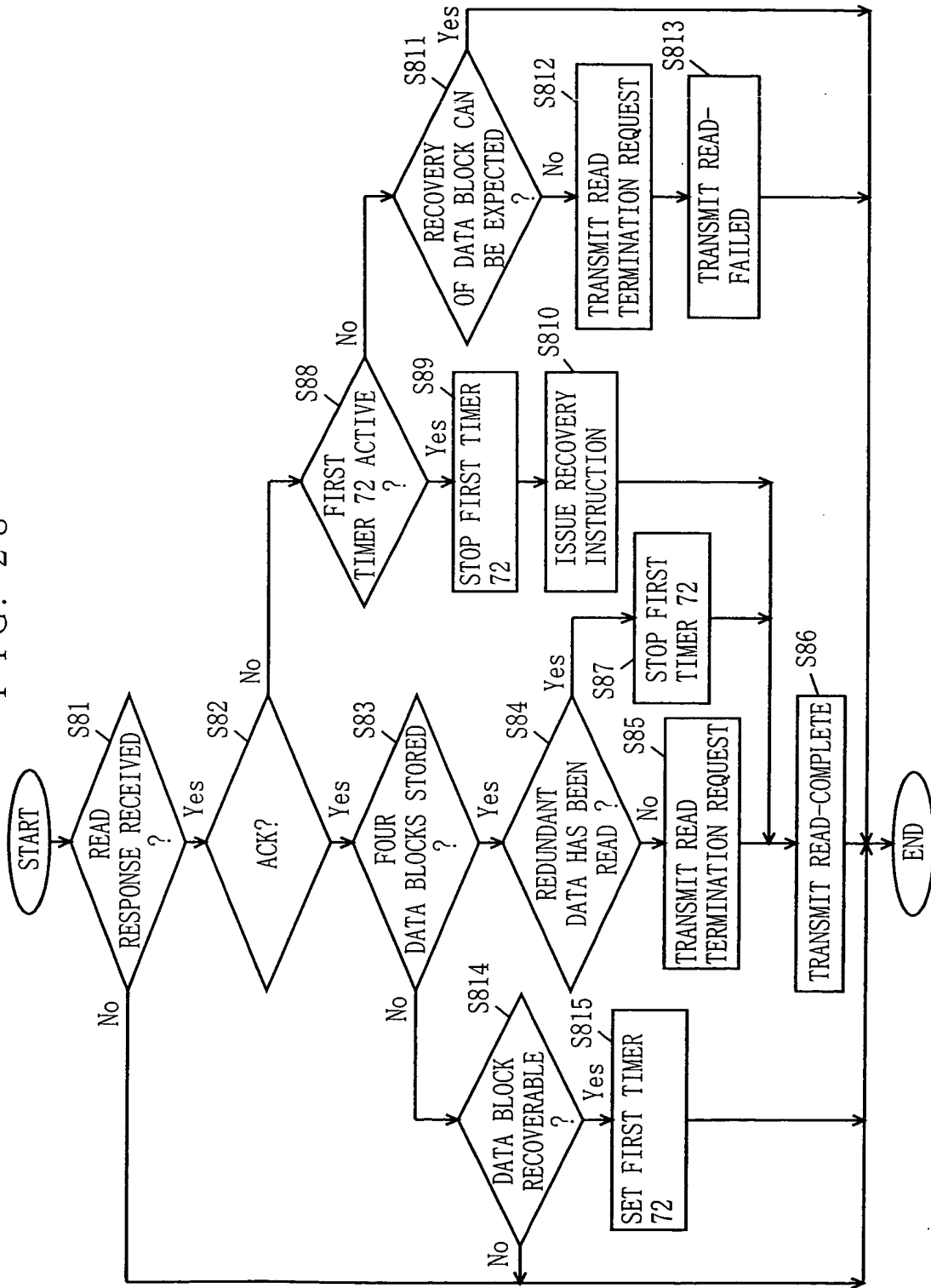


FIG. 29

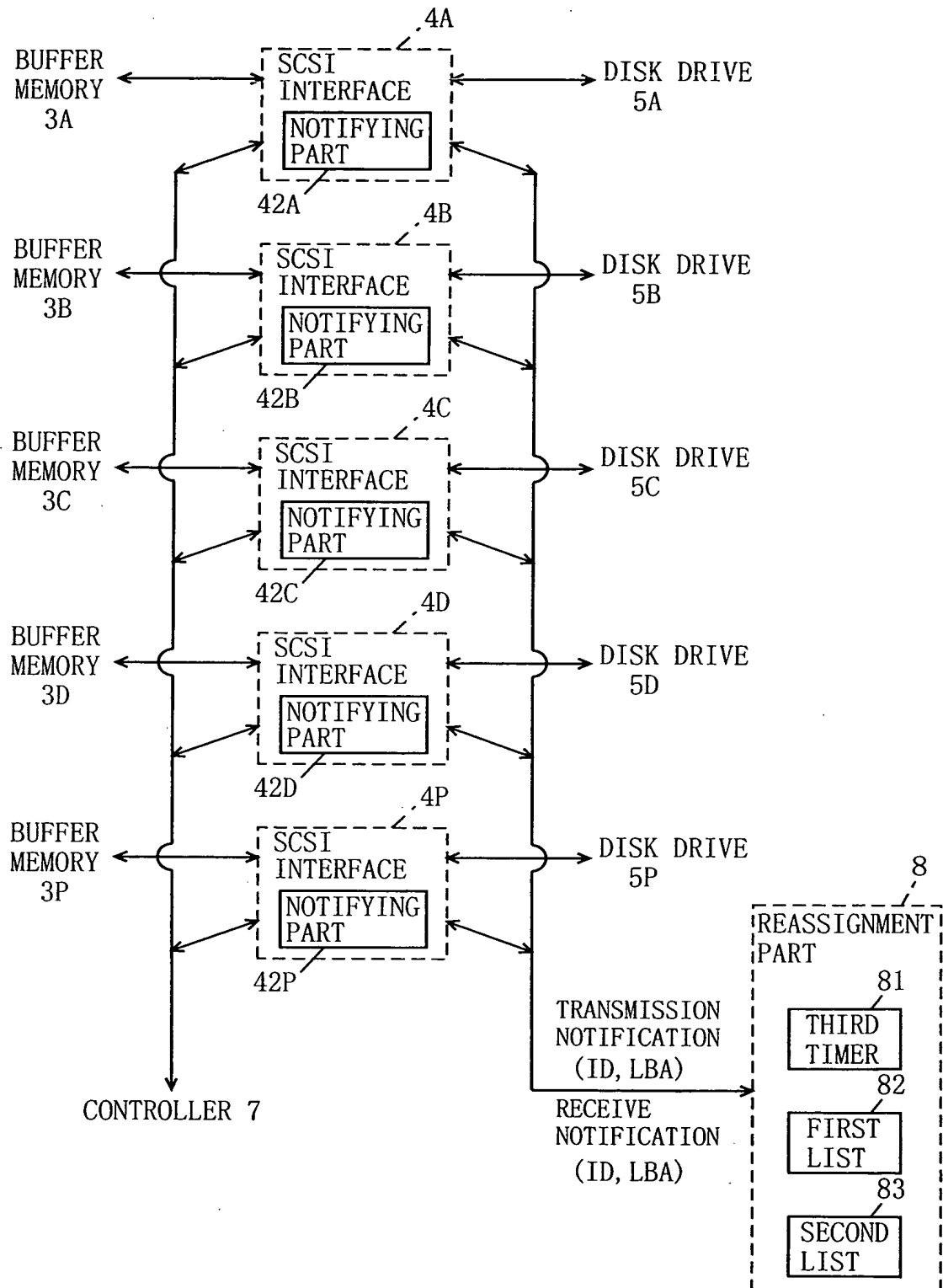


FIG. 30

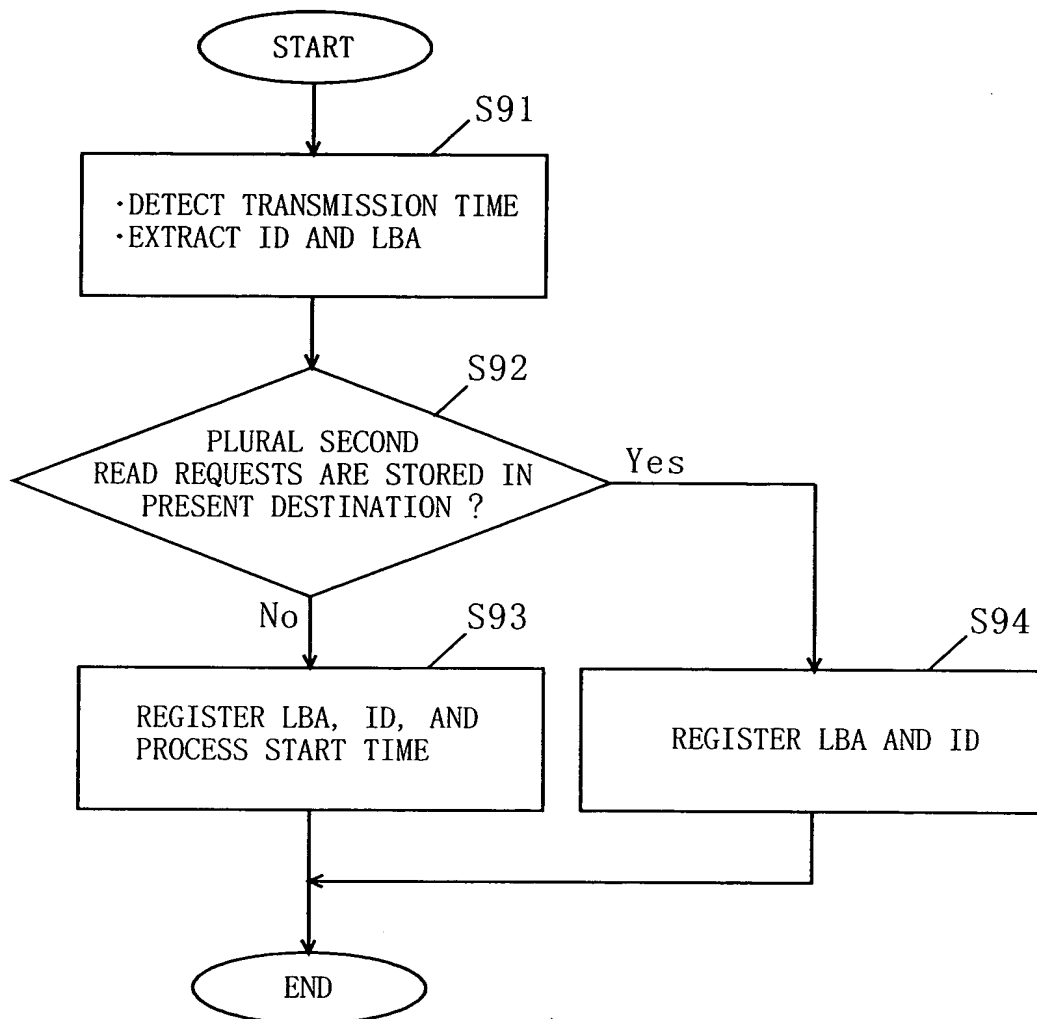


FIG. 31

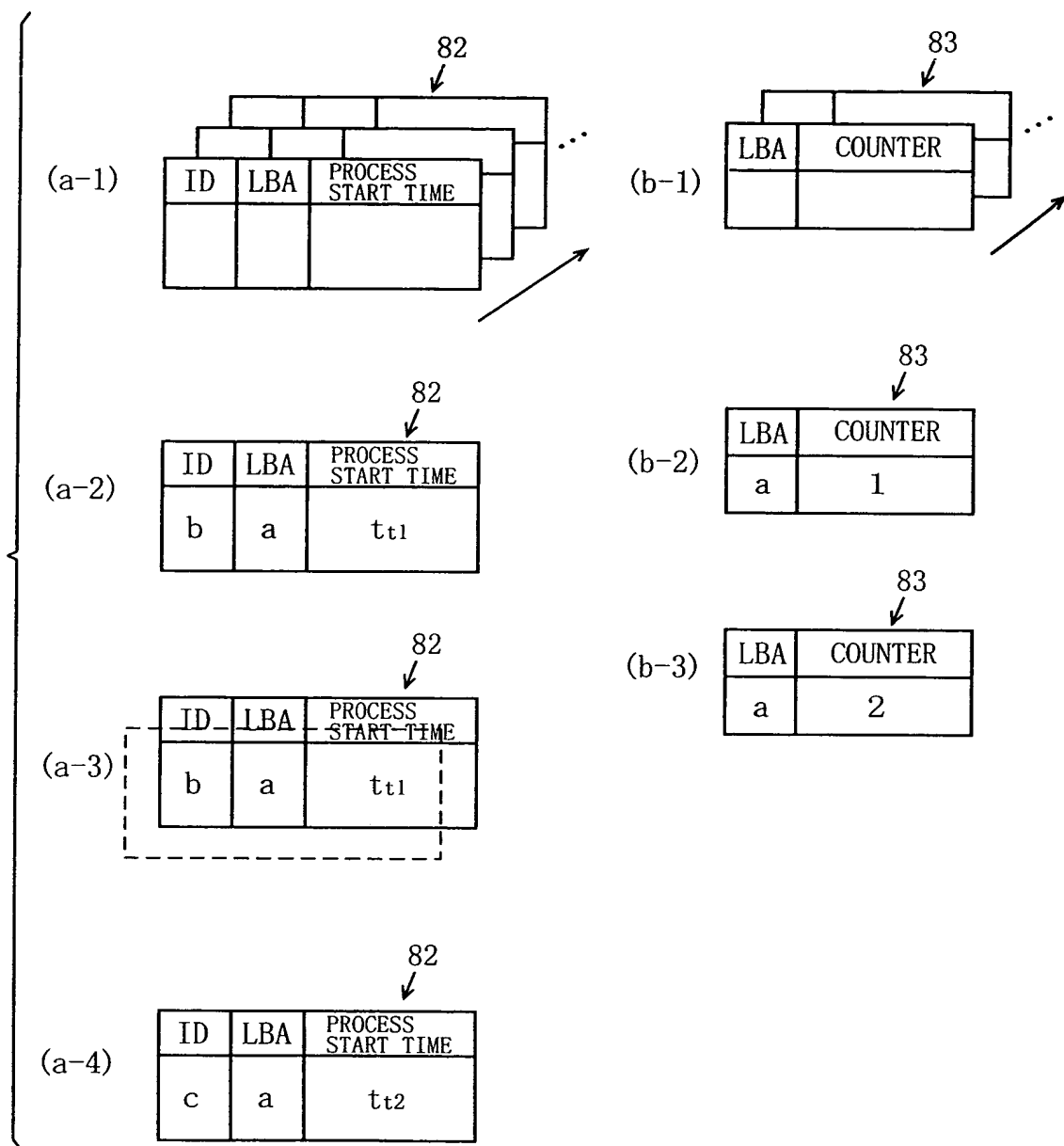


FIG. 32

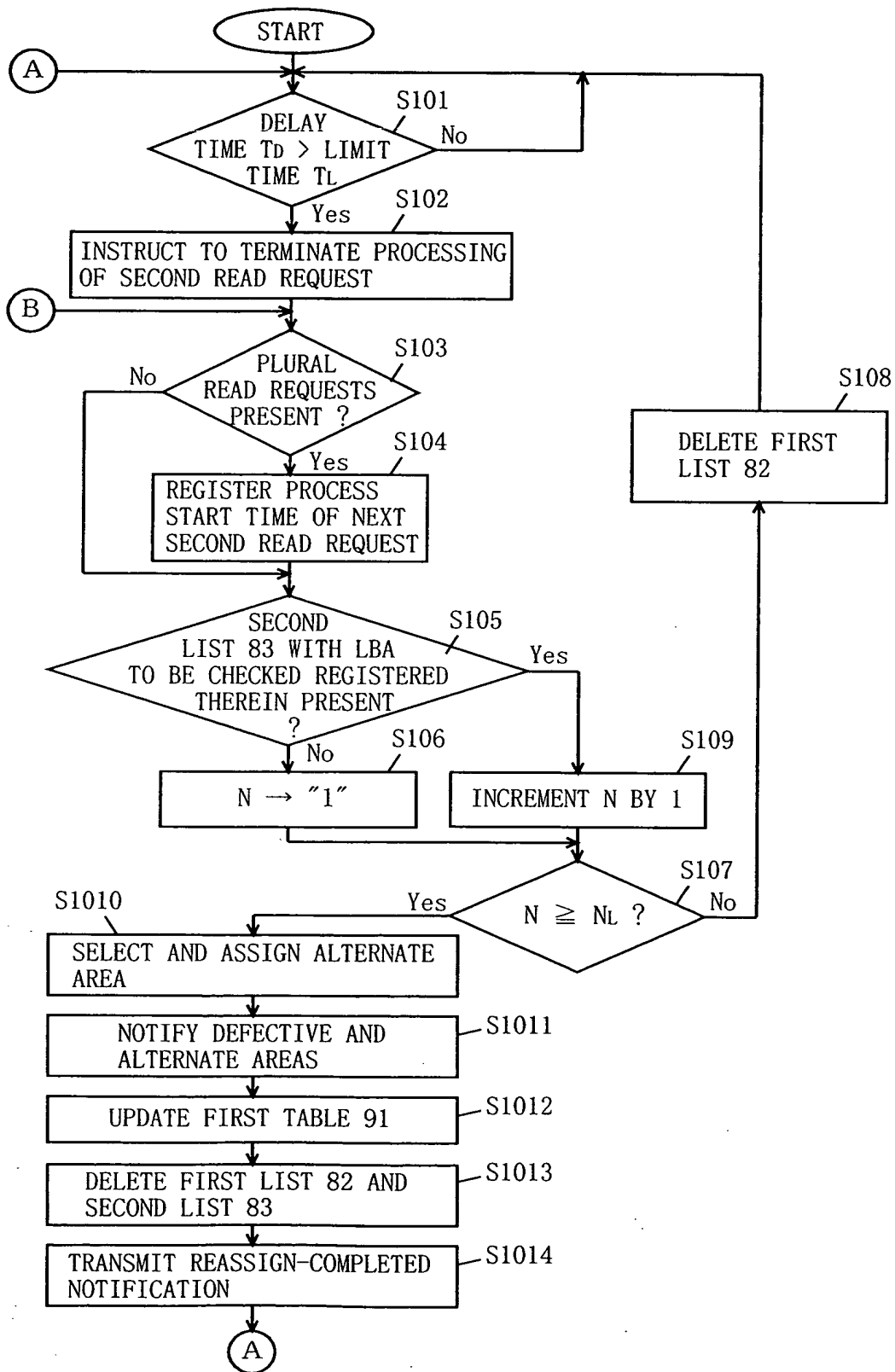


FIG. 33

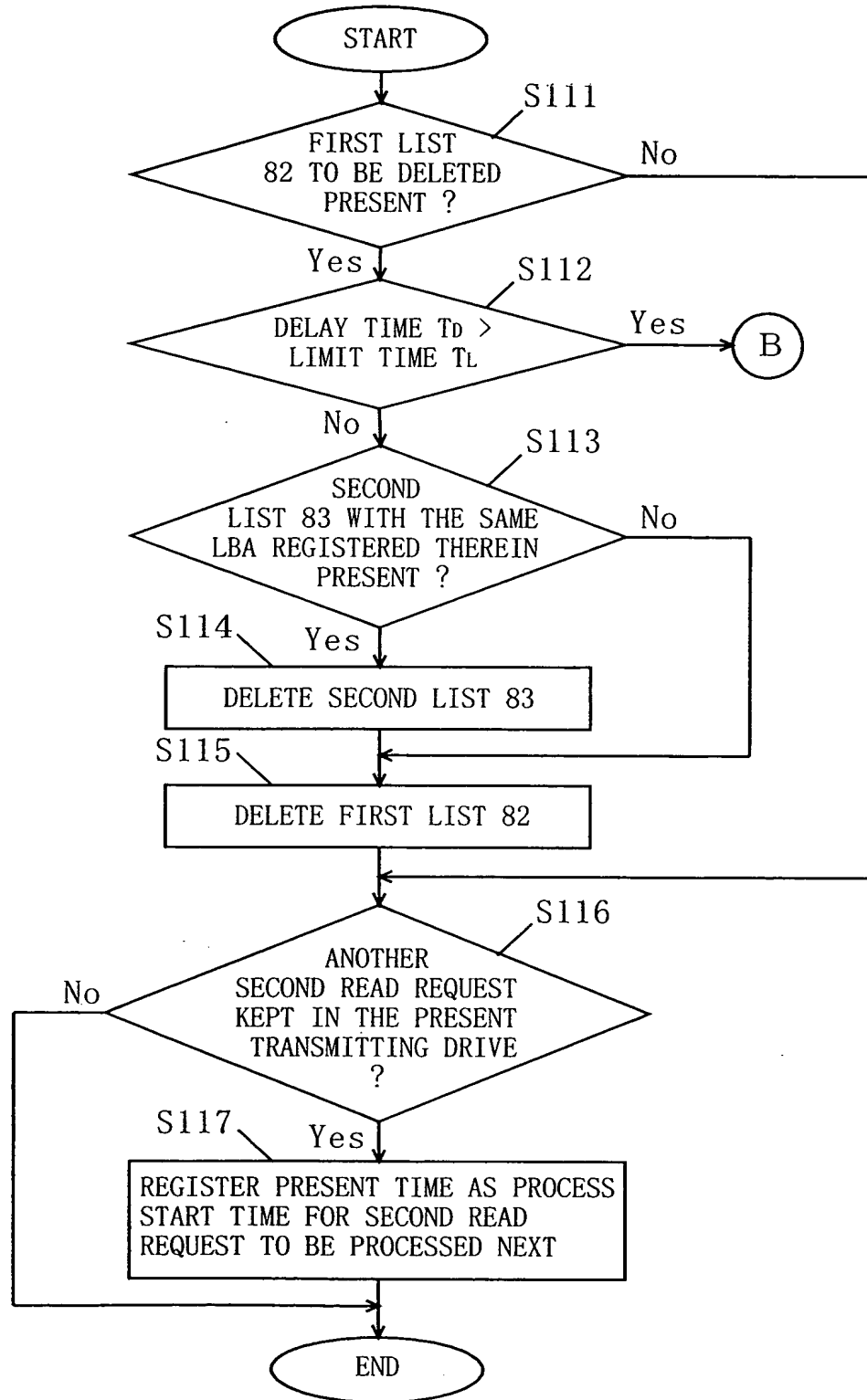


FIG. 34

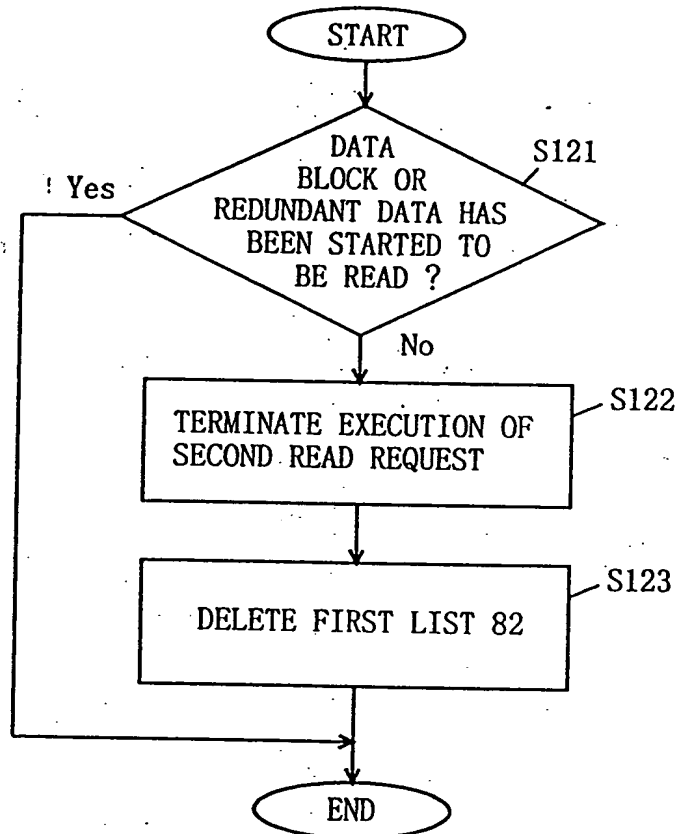


FIG. 35

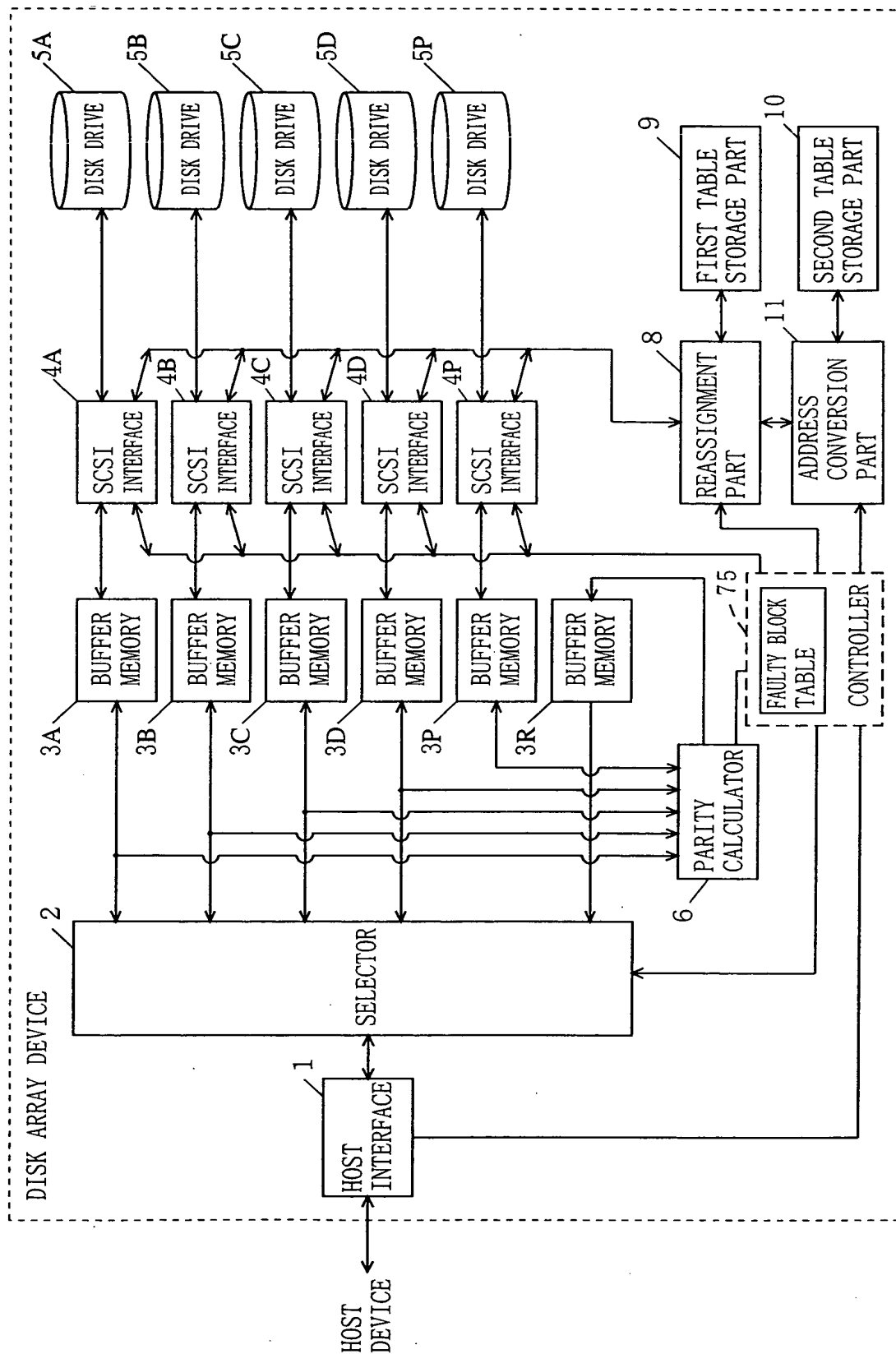


FIG. 36

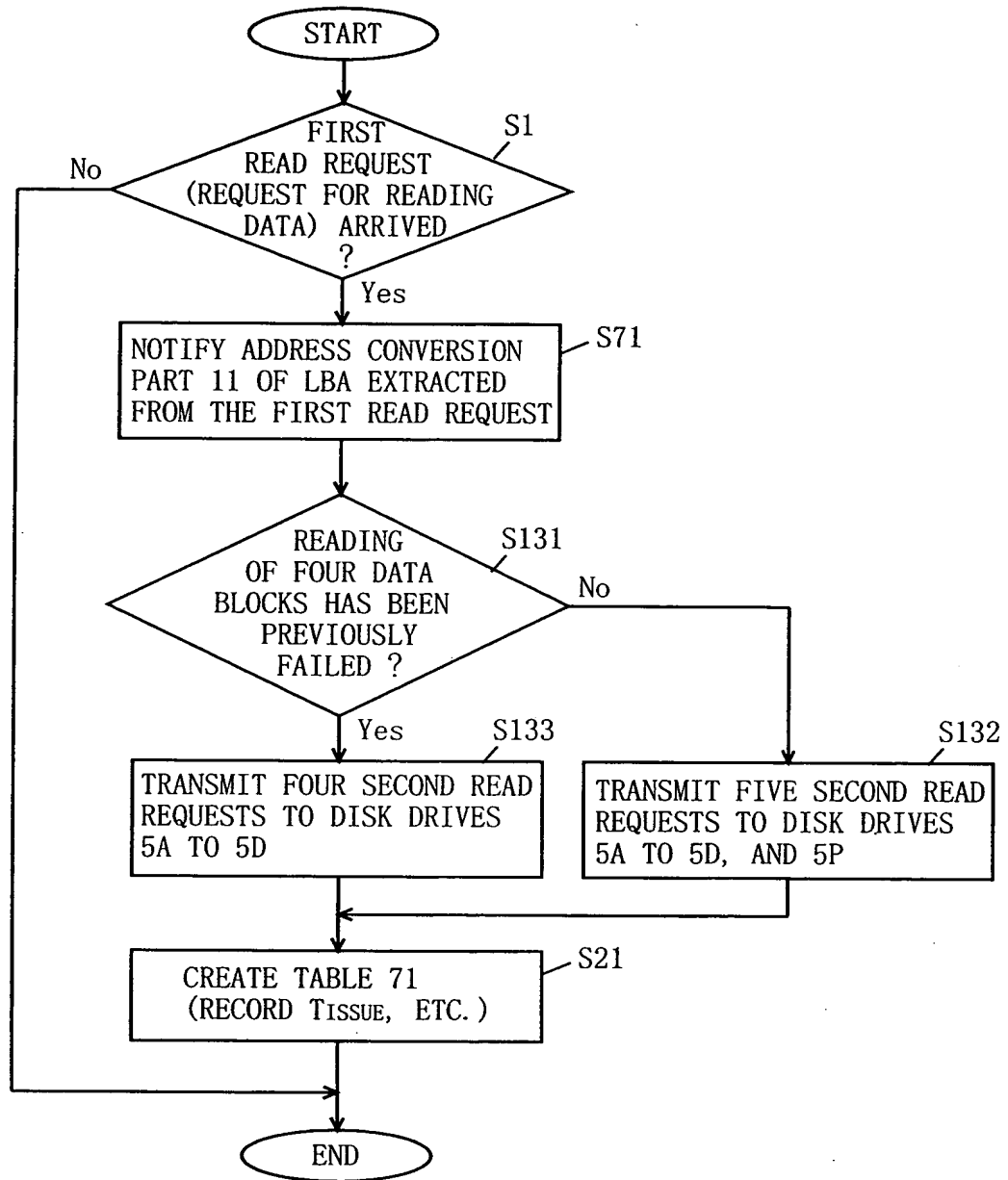


FIG. 37

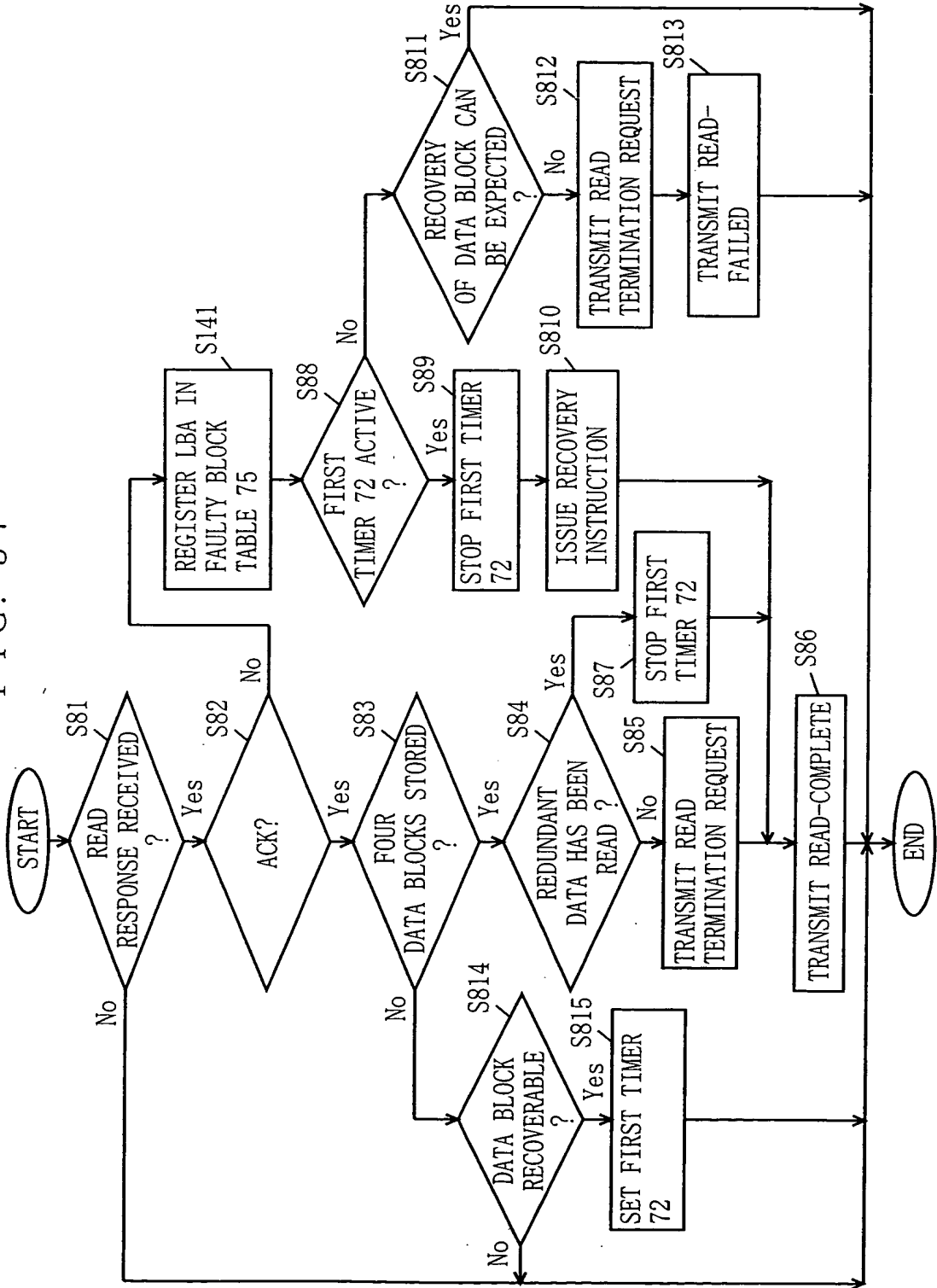


FIG. 38

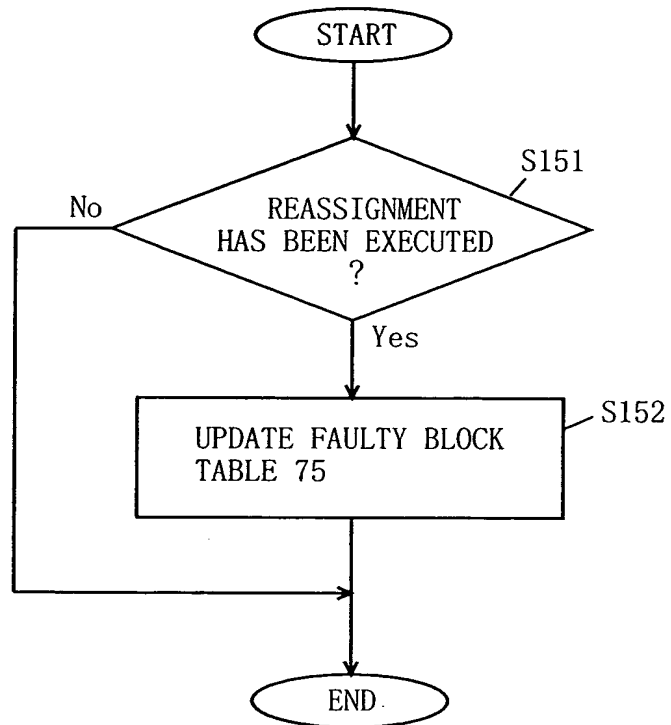


FIG. 39

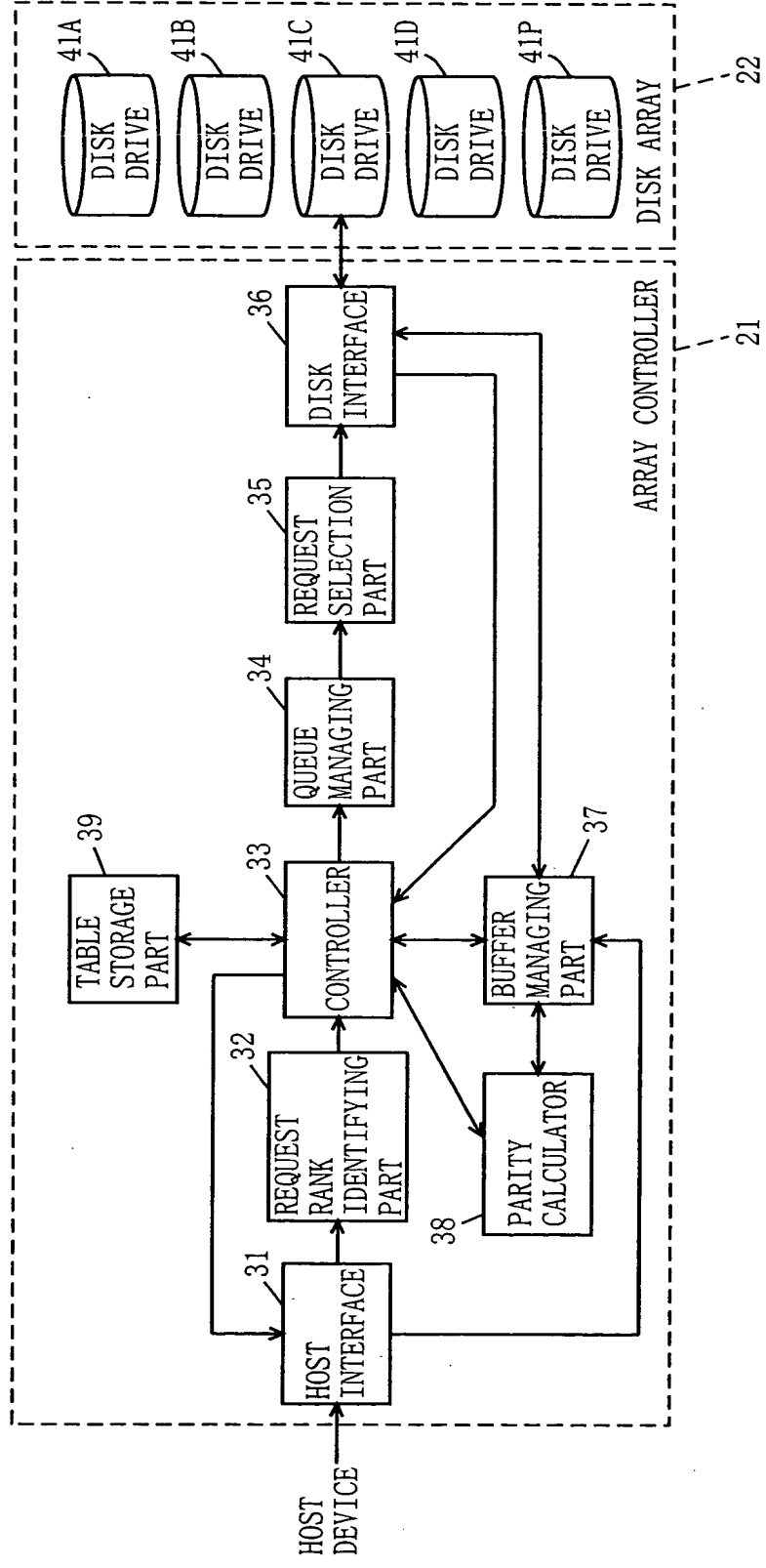


FIG. 40

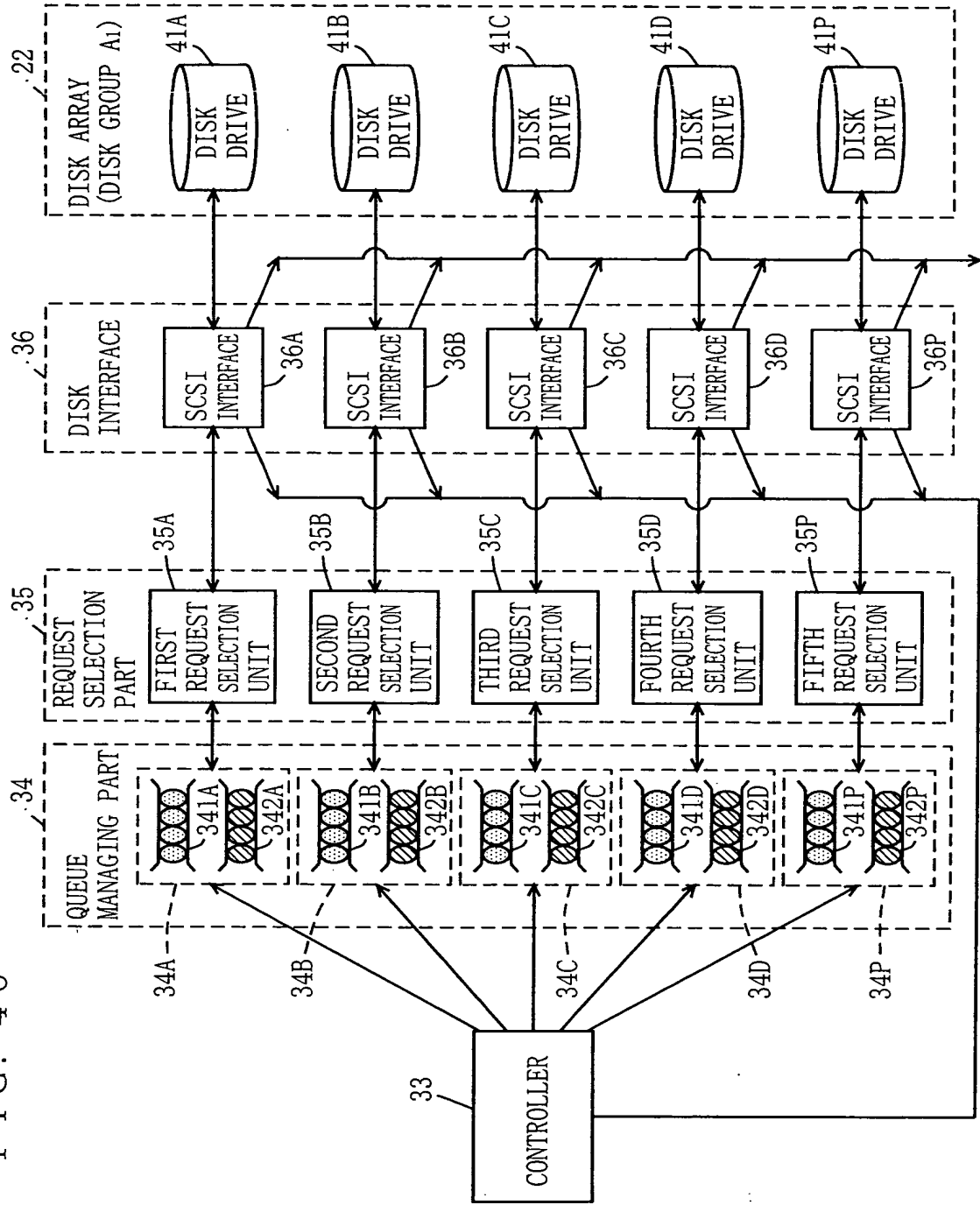
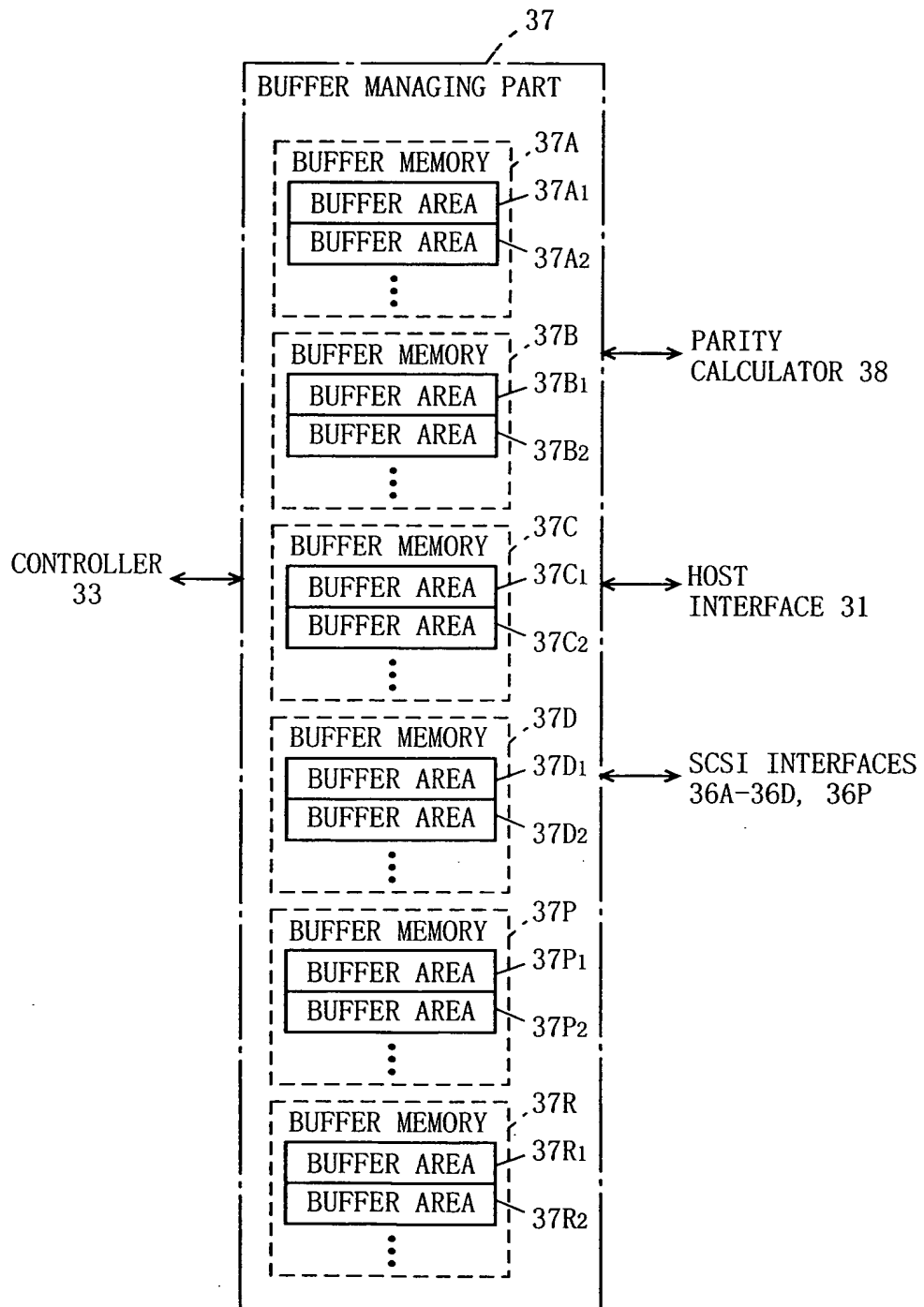


FIG. 41



F I G. 4 2 a

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	1	1	0	0	0	LUN		

Identify (SCSI MESSAGE)

F I G. 4 2 b

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	20h							
1	QUEUE TAG							

Queue_Tag (SCSI MESSAGE)

FIG. 43 a

BIT BYTE	7	6	5	4	3	2	1	0
0	2Bh(OPERATION CODE)							
1	LUN			DPO	FUA	Reserved		RelAdr
2	(MSB)							
3	LOGICAL BLOCK ADDRESS							
4								
5								
6								
7	(LSB)							
8	Reserved							
9	(MSB)							
10	TRANSFER DATA LENGTH							
11	(LSB)							
12	CONTROL BYTE							

Read_IO (SCSI COMMAND)

FIG. 43 b

BIT BYTE	7	6	5	4	3	2	1	0
0	2Ah (OPERATION CODE)							
1	LUN			DPO	FUA	Reserved		RelAdr
2	(MSB)							
3	LOGICAL BLOCK ADDRESS							
4								
5								
6								
7	(MSB)							
8	TRANSFER DATA LENGTH							
9	(LSB)							
10	Reserved							
11	(MSB)							
12	TRANSFER DATA LENGTH							
13	(LSB)							
14	CONTROL BYTE							

Write_IO (SCSI COMMAND)

FIG. 44

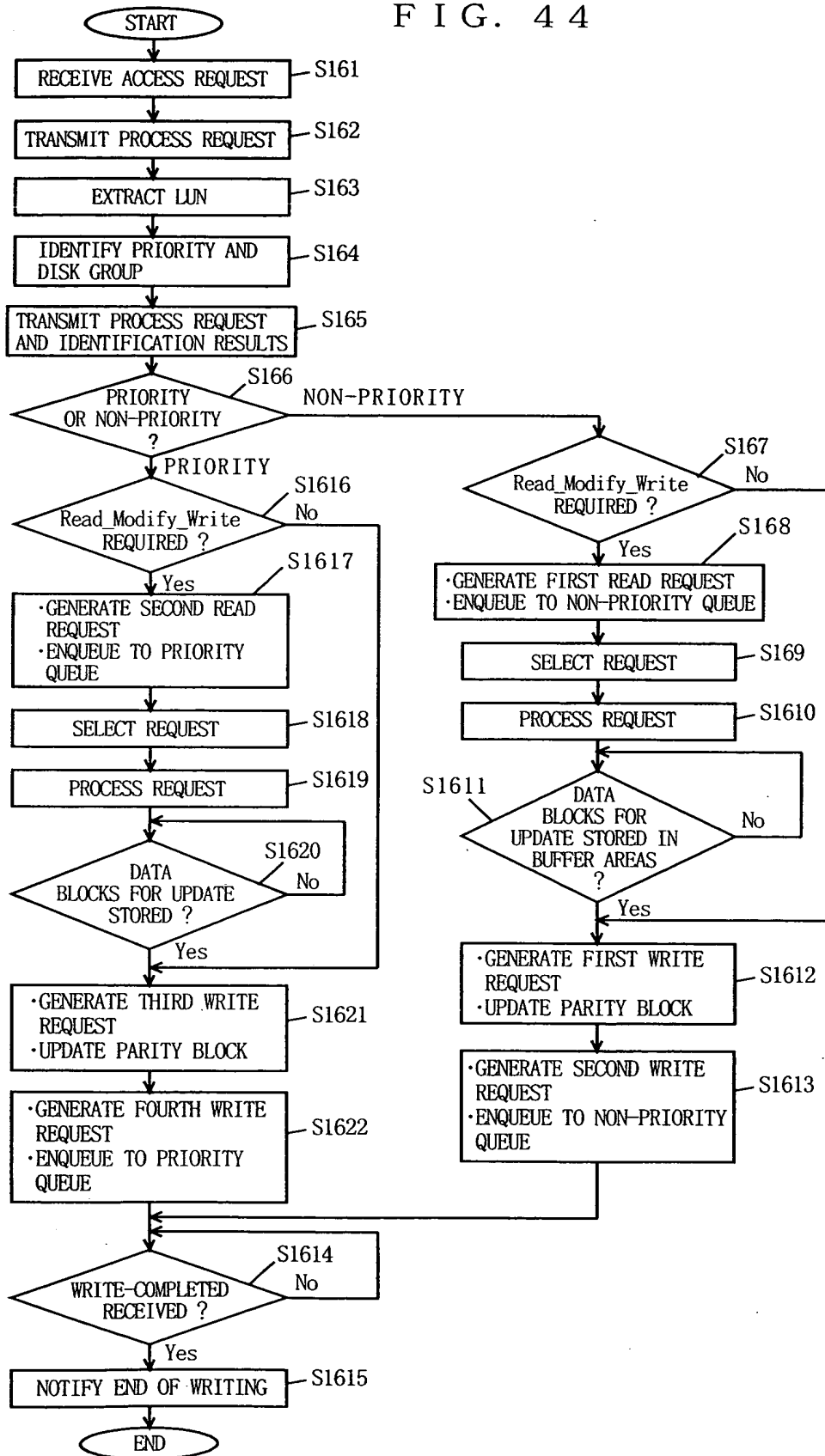


FIG. 45

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	COMMAND TYPE							
1	IDENTIFICATION NUMBER ★ 1							
2	LUN			CONTROL INFORMATION				
3	(MSB)	LOGICAL BLOCK ADDRESS (LBA)						
4		LOGICAL BLOCK ADDRESS (LBA)						
5		LOGICAL BLOCK ADDRESS (LBA)						
6		LOGICAL BLOCK ADDRESS (LBA)						(LSB)
7	(MSB)	DATA LENGTH						
8		DATA LENGTH						(LSB)
:	DATA							

FIG. 46

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	COMMAND TYPE							
1	IDENTIFICATION NUMBER ★ 1							
2	<u>PRIORITY</u>	<u>DISK</u>		<u>CONTROL INFORMATION</u>				
		GROUP NUMBER						
3	(MSB)	LOGICAL BLOCK ADDRESS (LBA)						
4		LOGICAL BLOCK ADDRESS (LBA)						
5		LOGICAL BLOCK ADDRESS (LBA)						
6		LOGICAL BLOCK ADDRESS (LBA)						(LSB)
7	(MSB)	DATA LENGTH						
8		DATA LENGTH						(LSB)
:	DATA							

FIG. 47

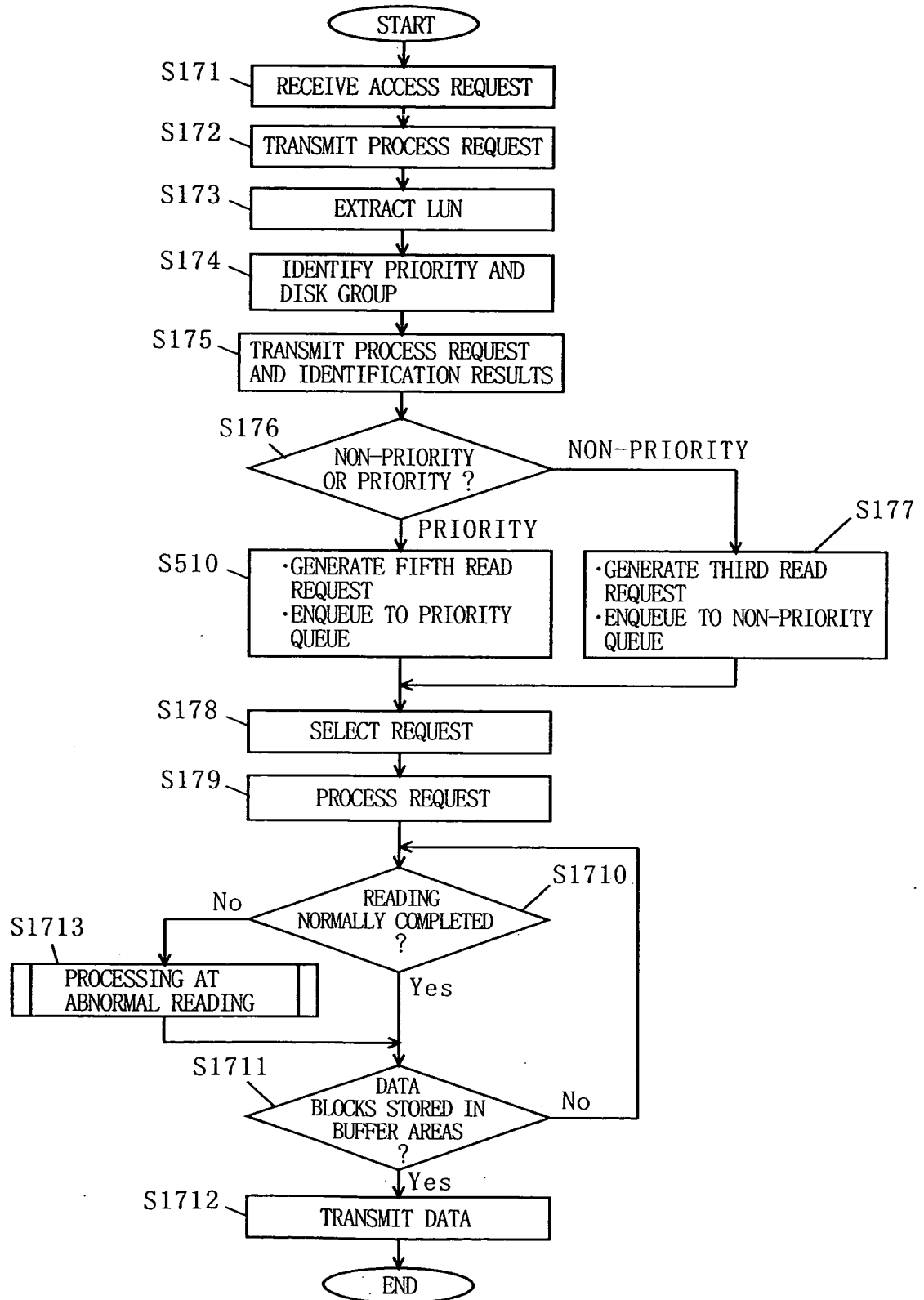


FIG. 48

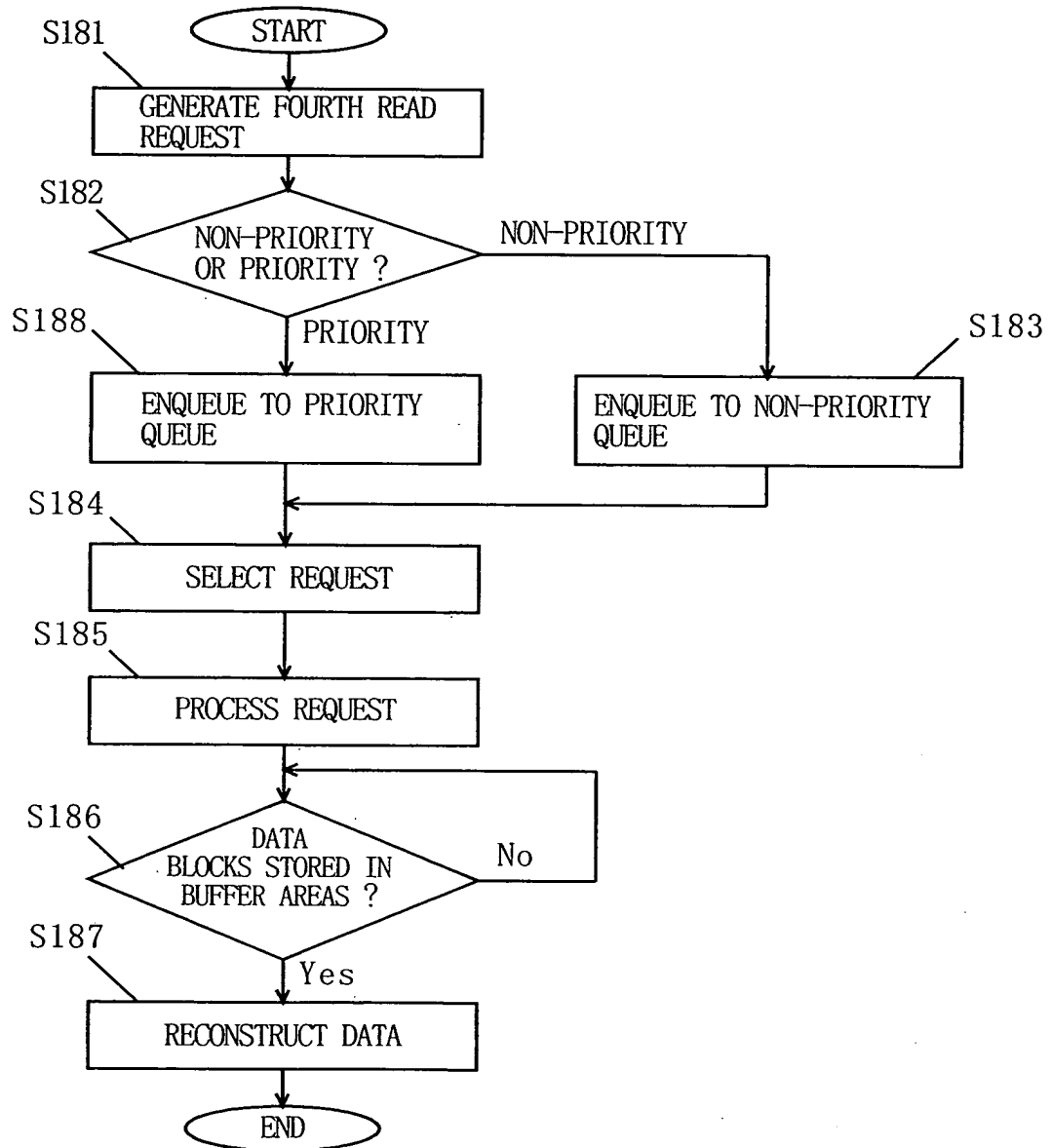
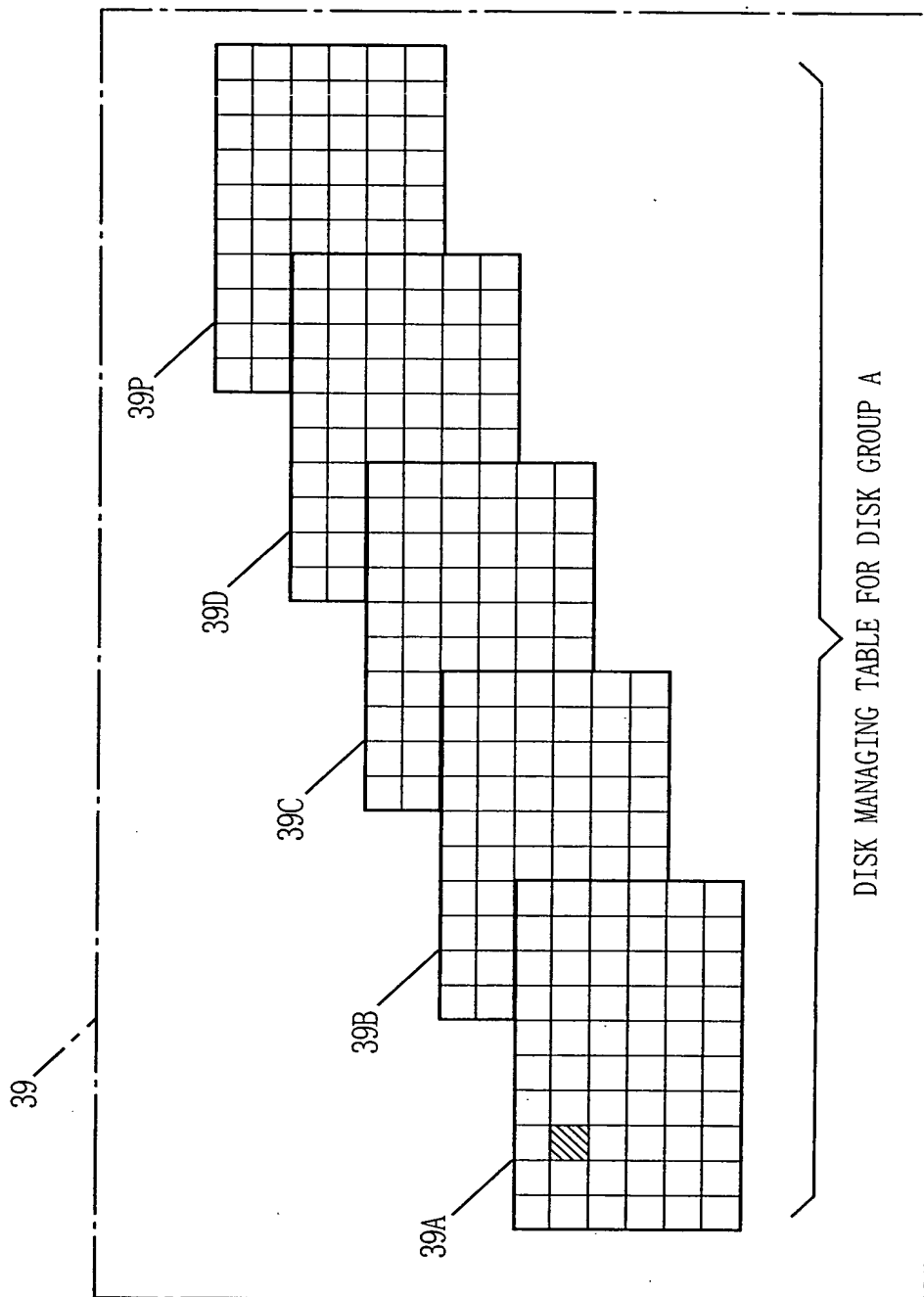


FIG. 49



3111~3115、

NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION

FIG. 51

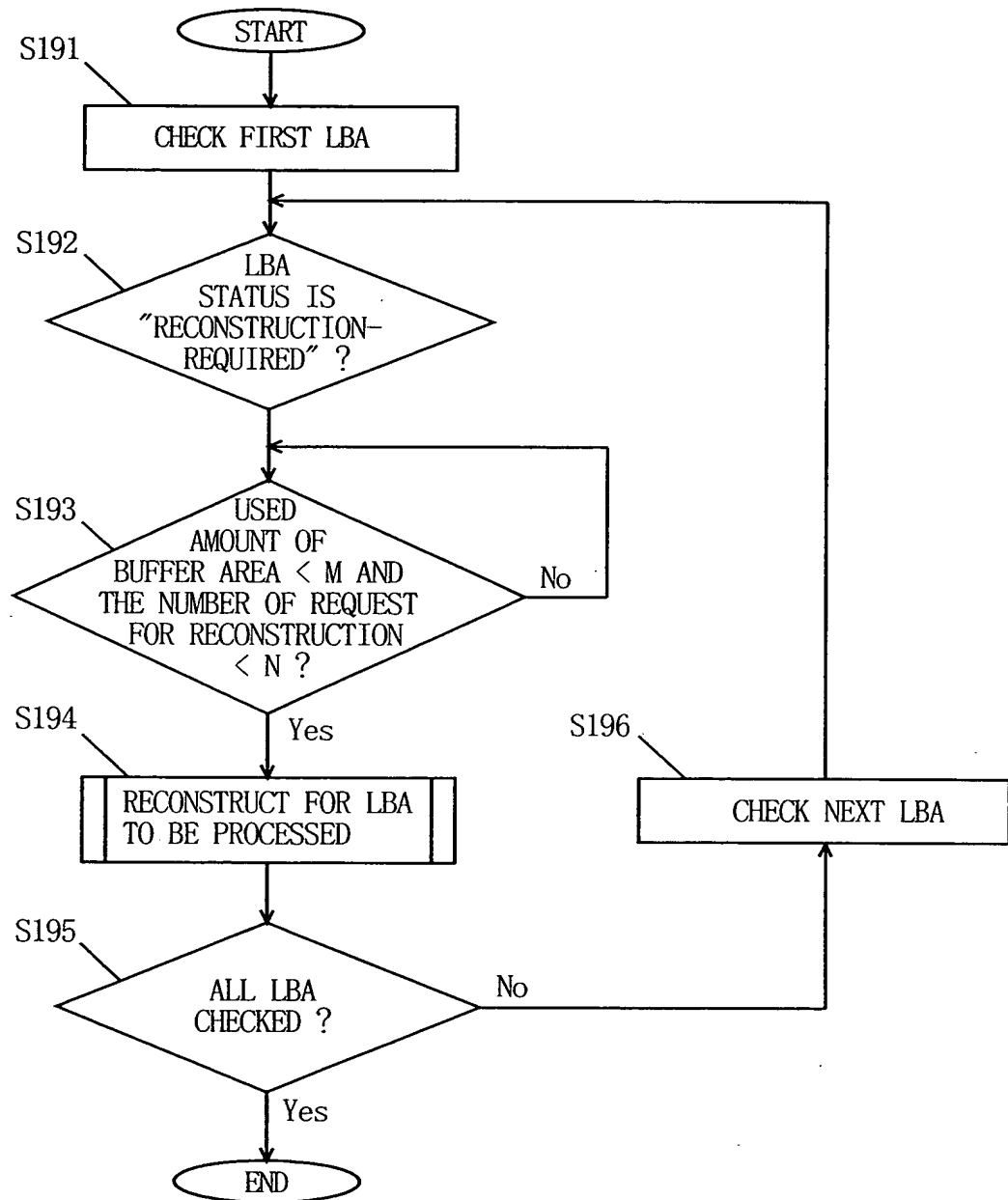


FIG. 52

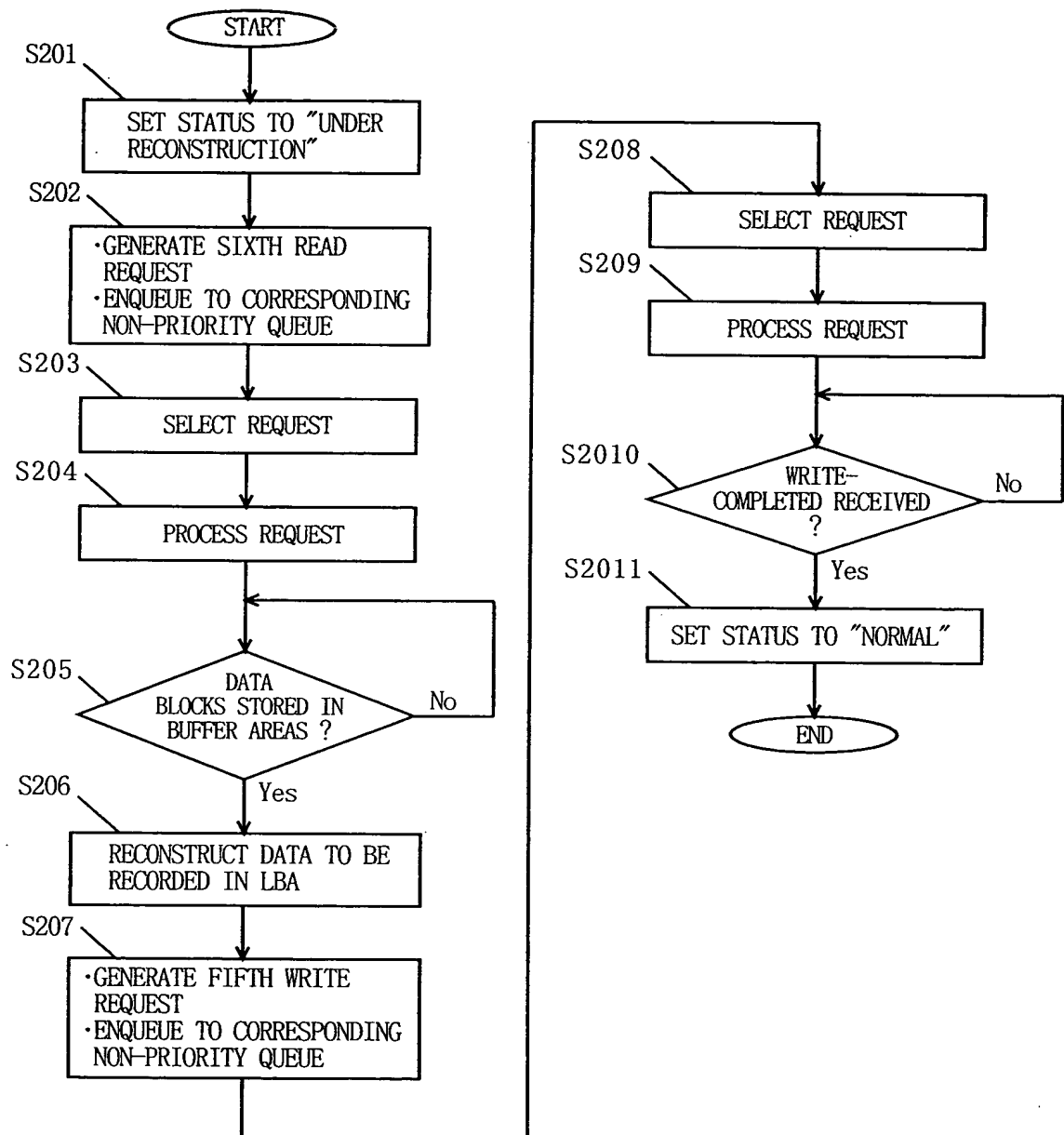


FIG. 53

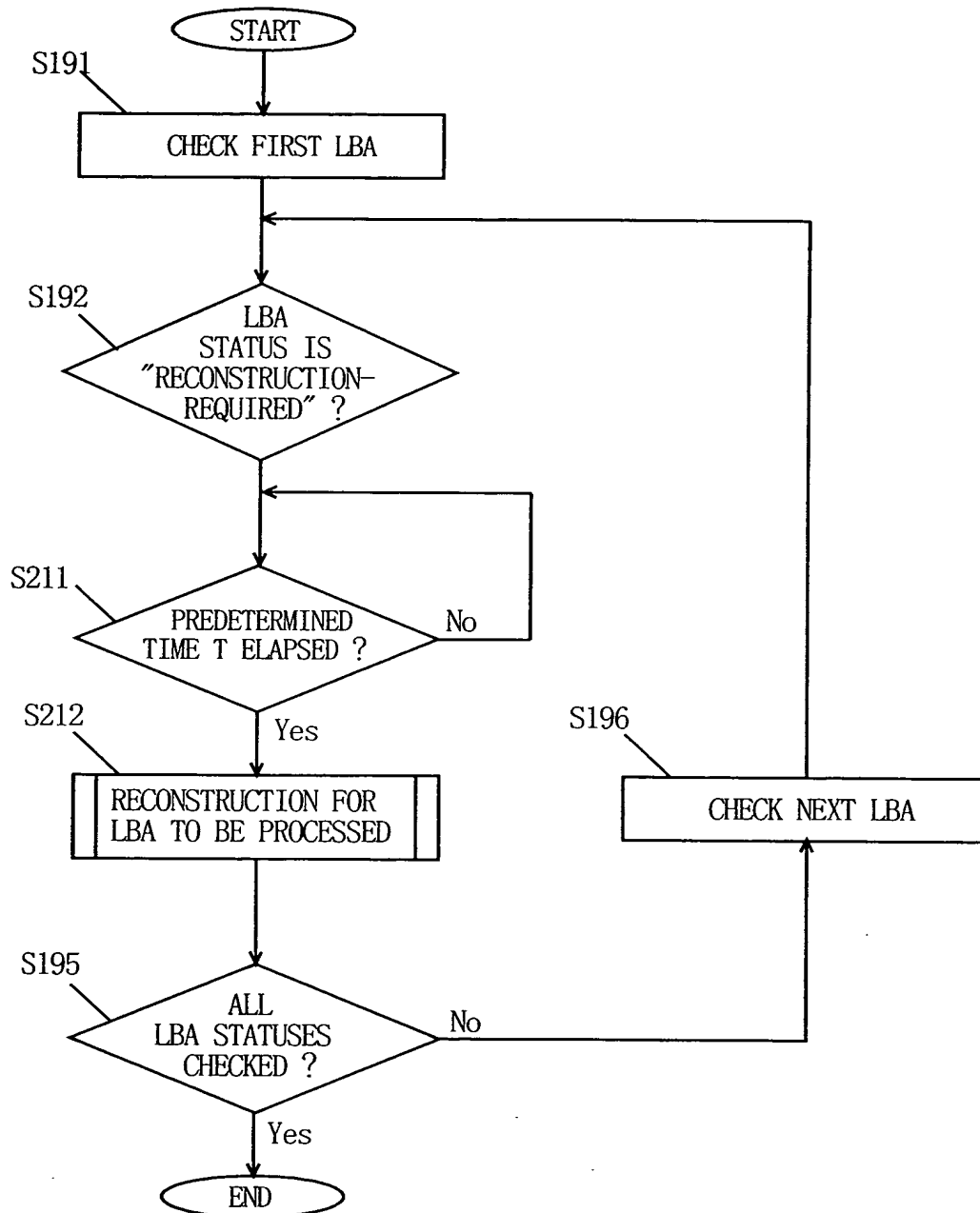


FIG. 54

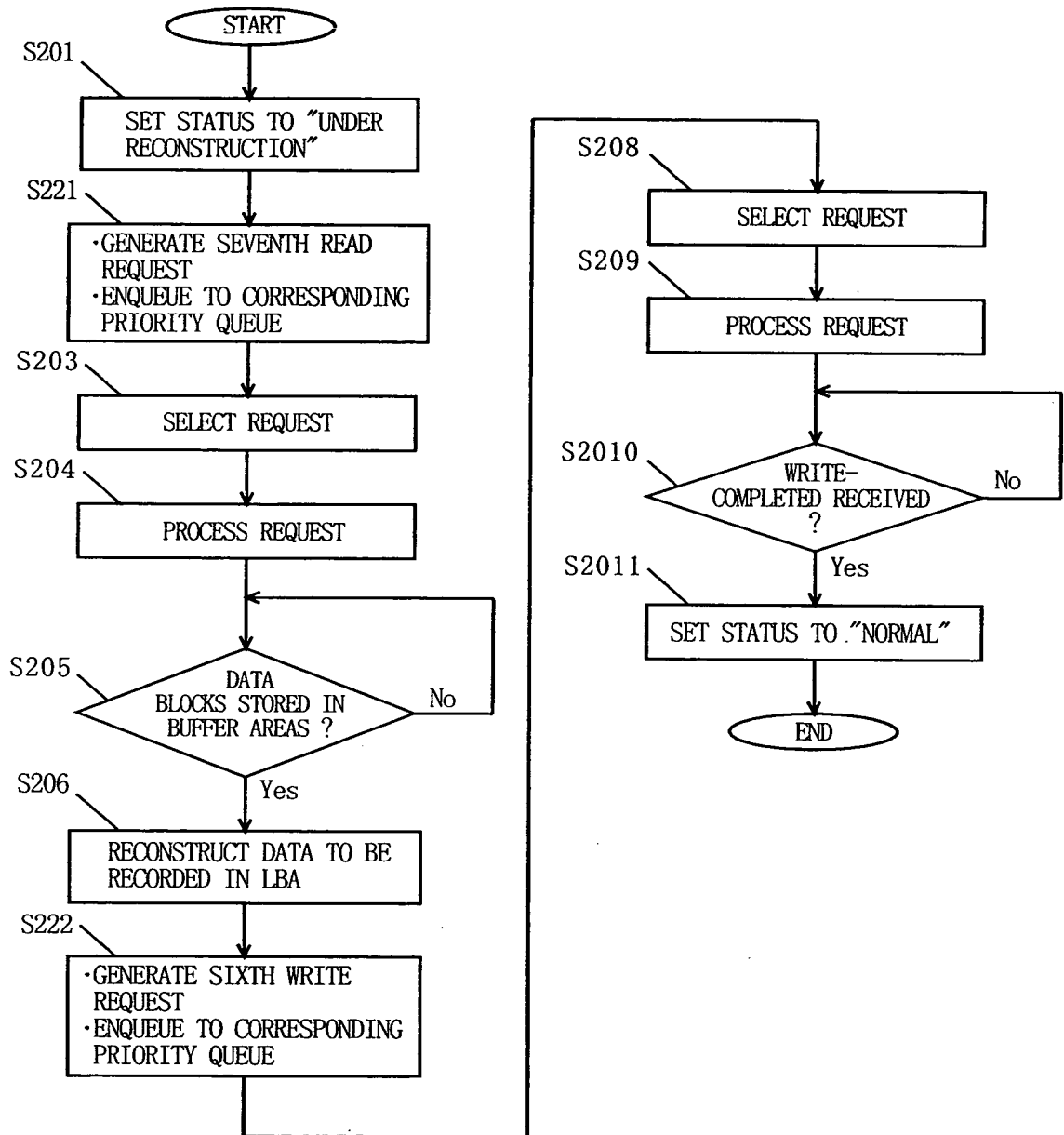


FIG. 55

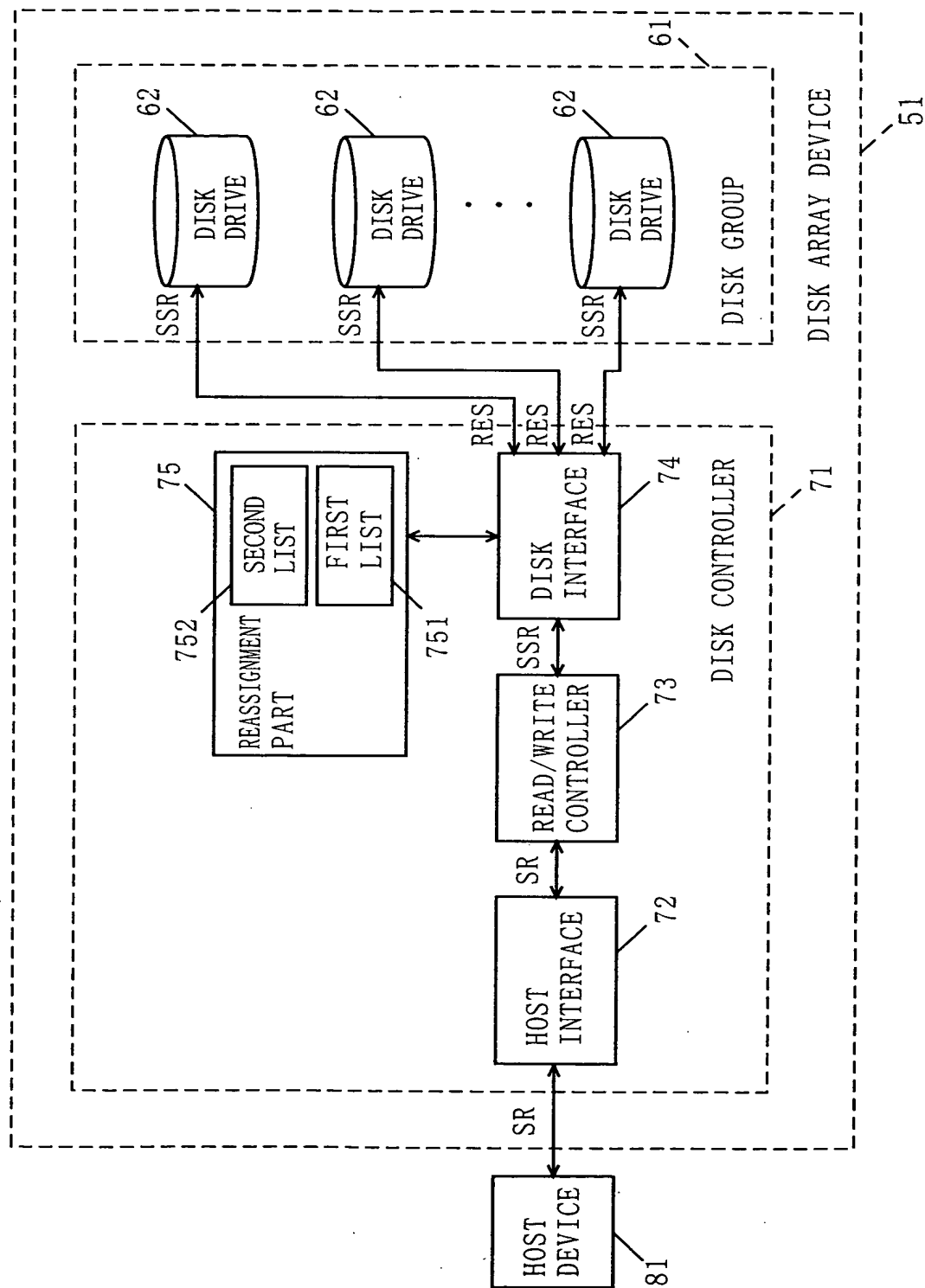


FIG. 56

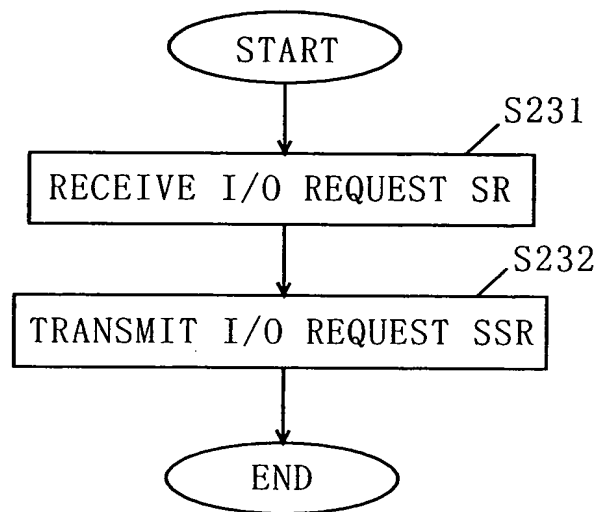


FIG. 57

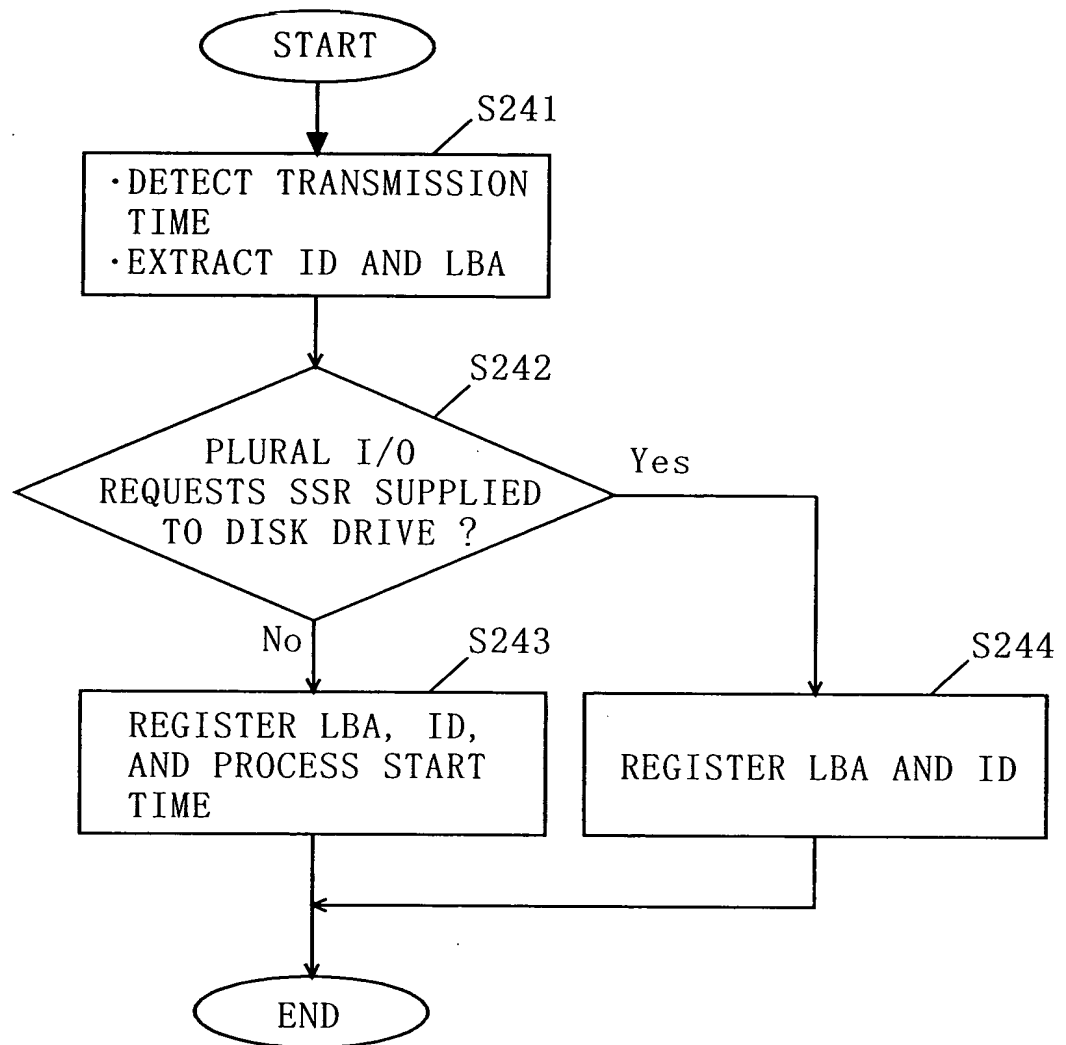


FIG. 58

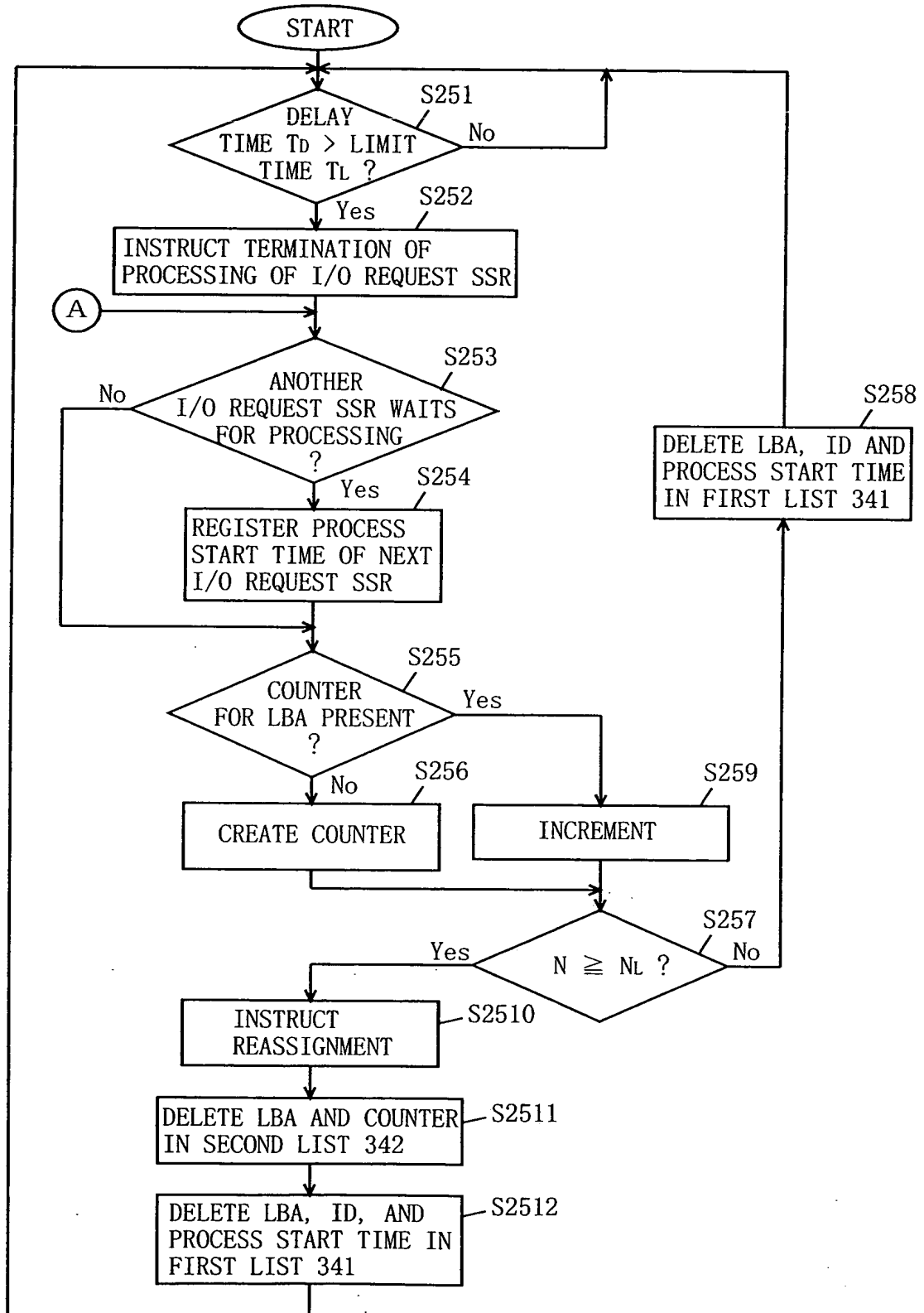


FIG. 59

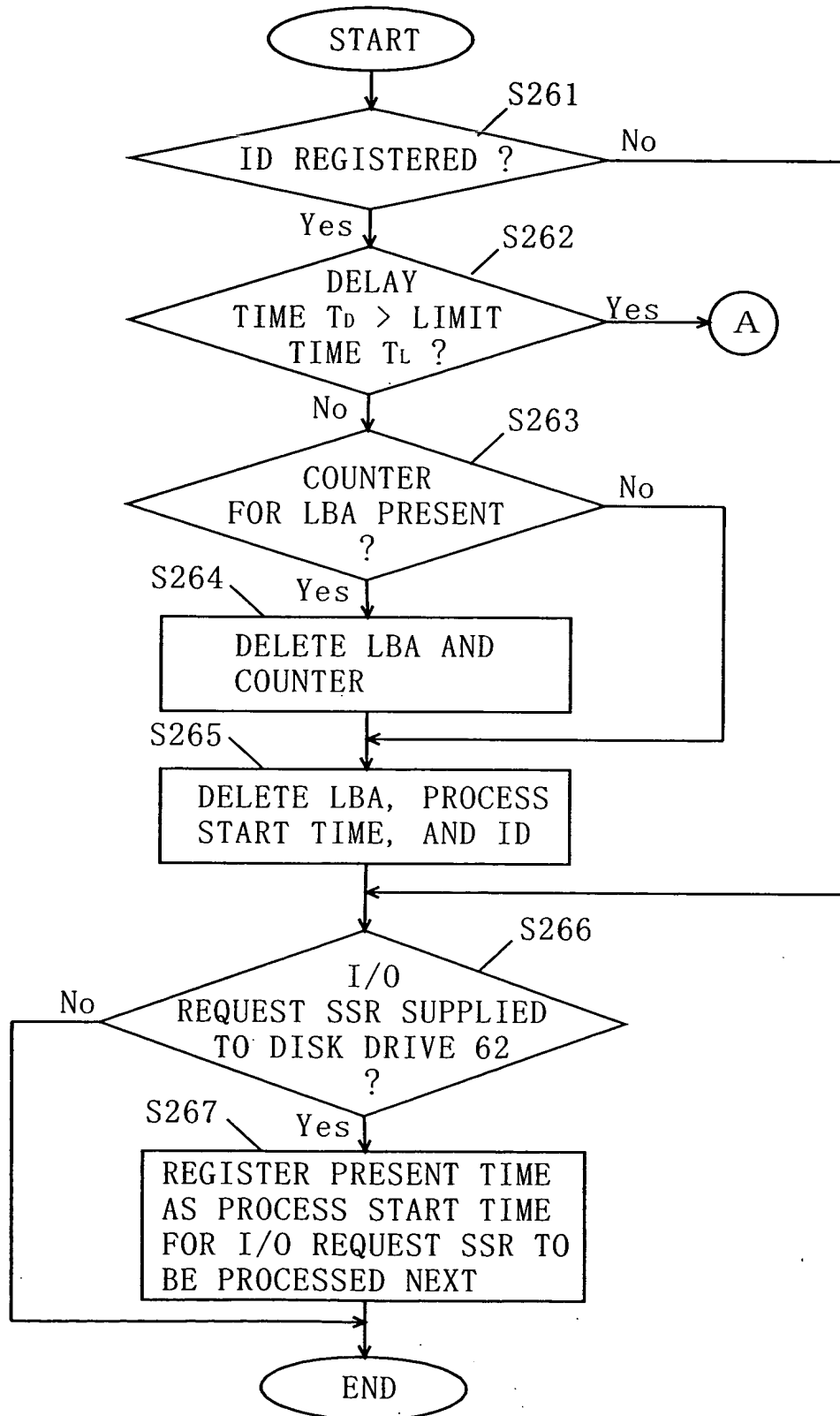


FIG. 60

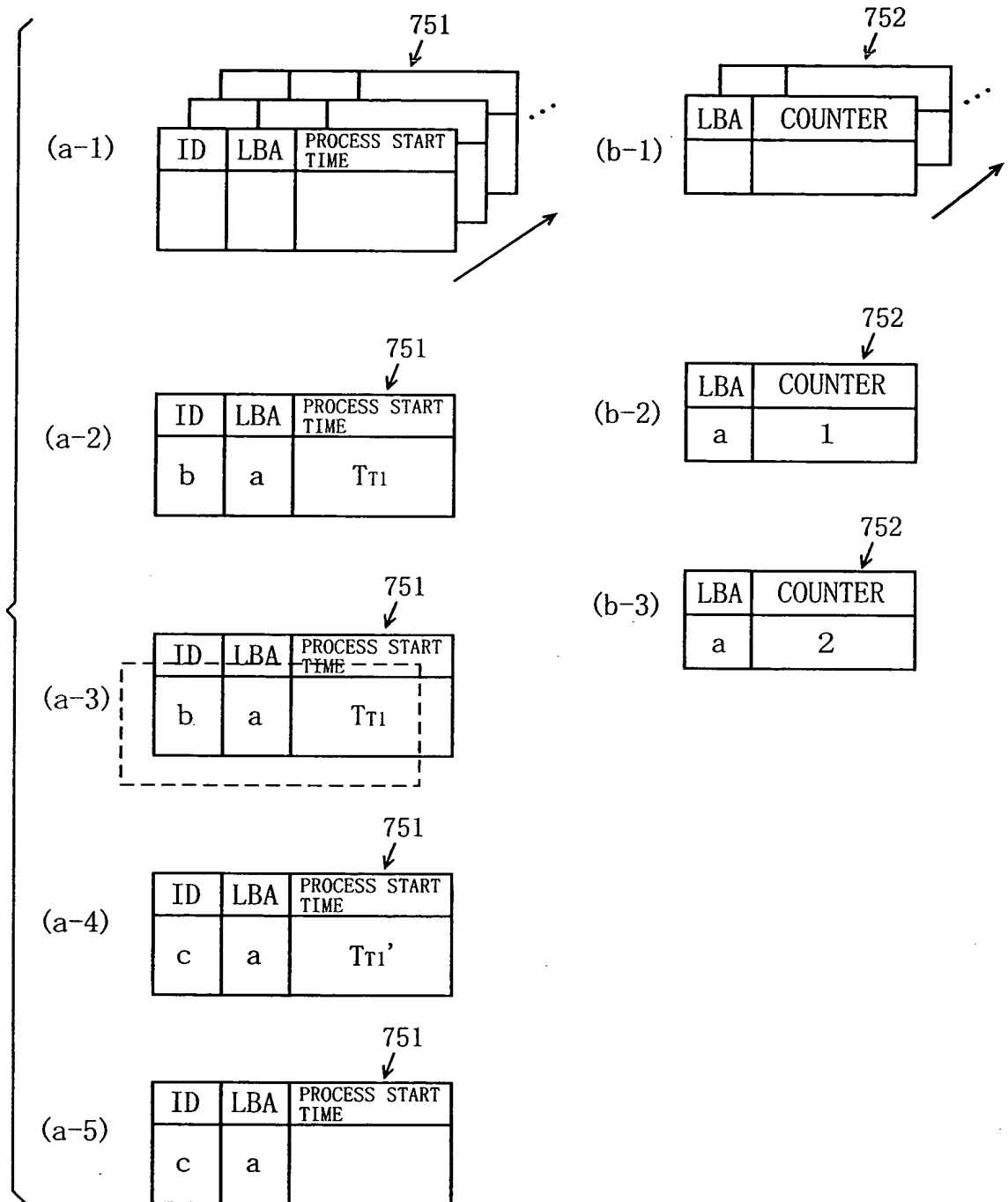


FIG. 6 2

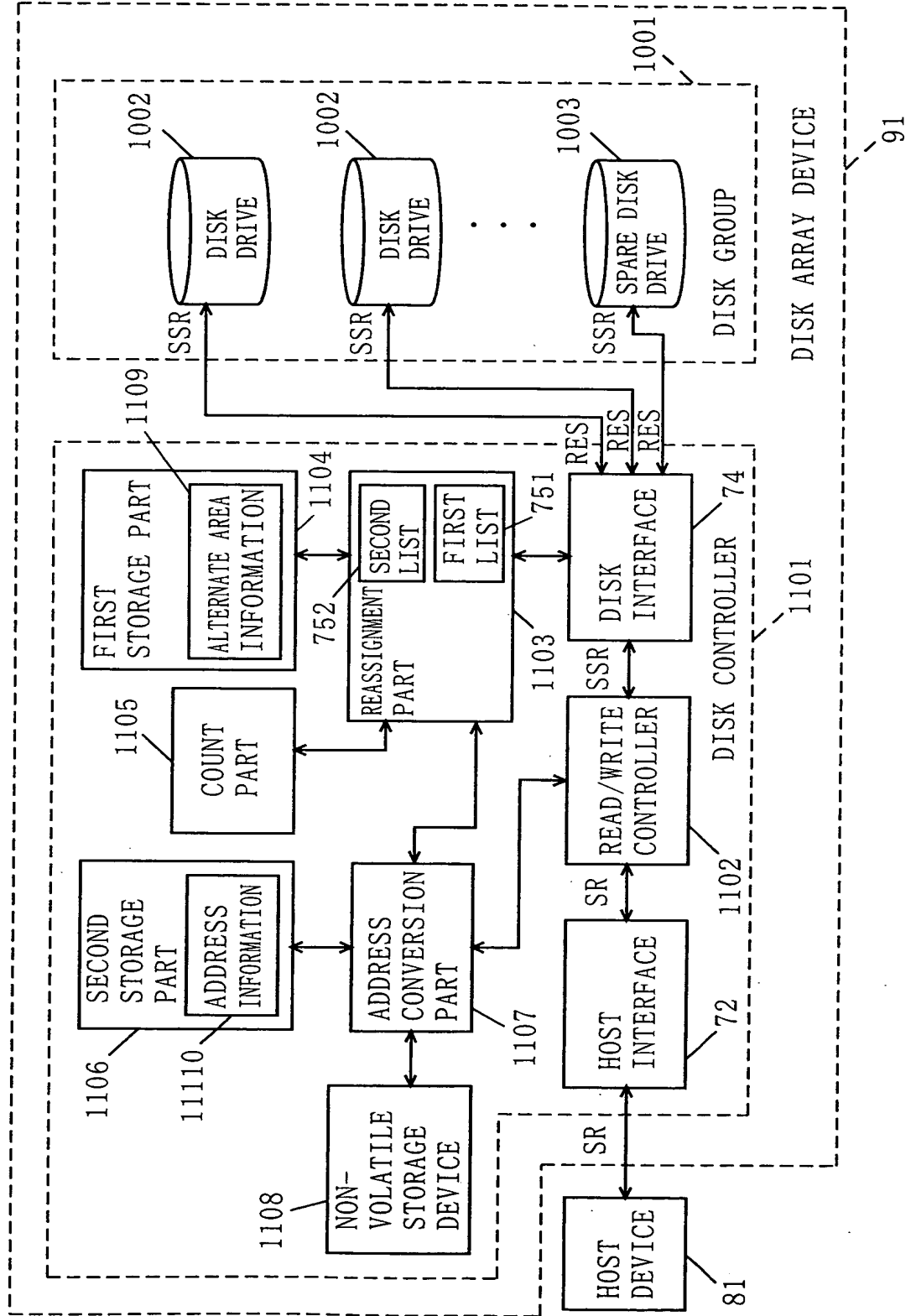


FIG. 63

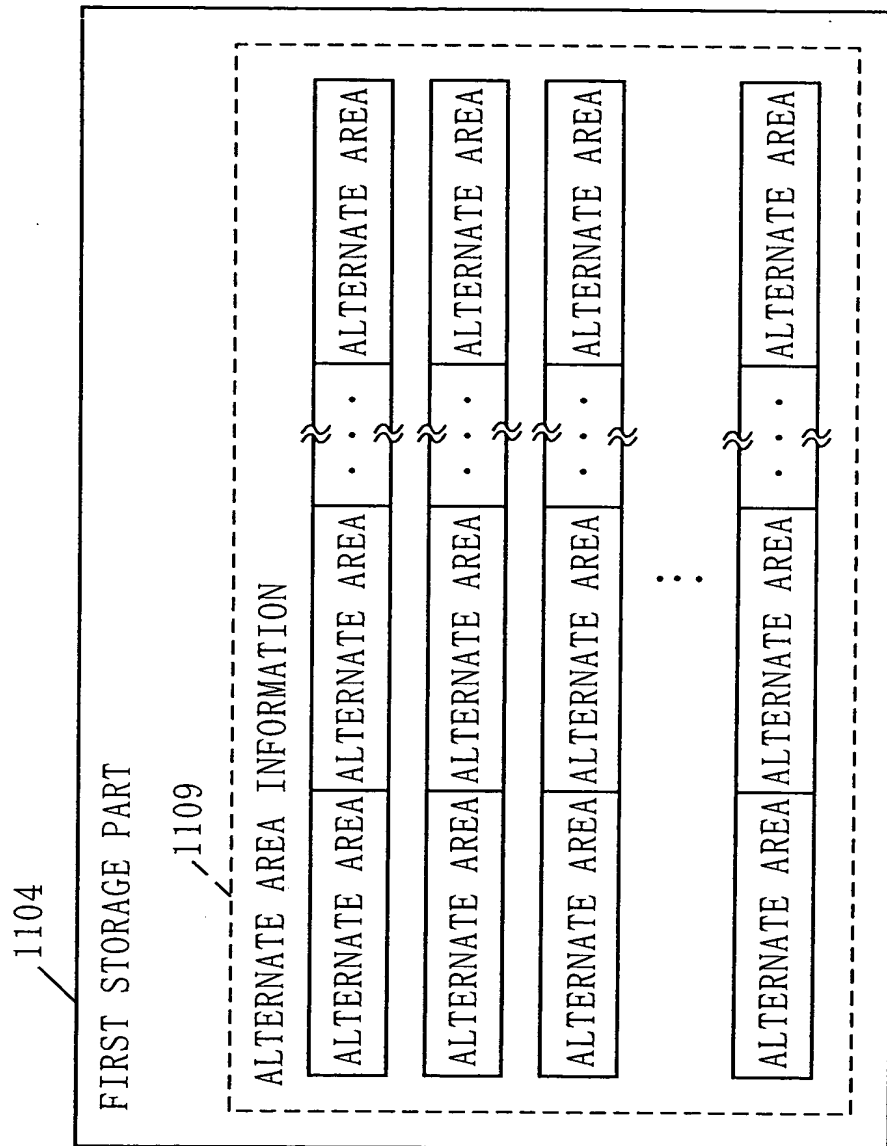


FIG. 64

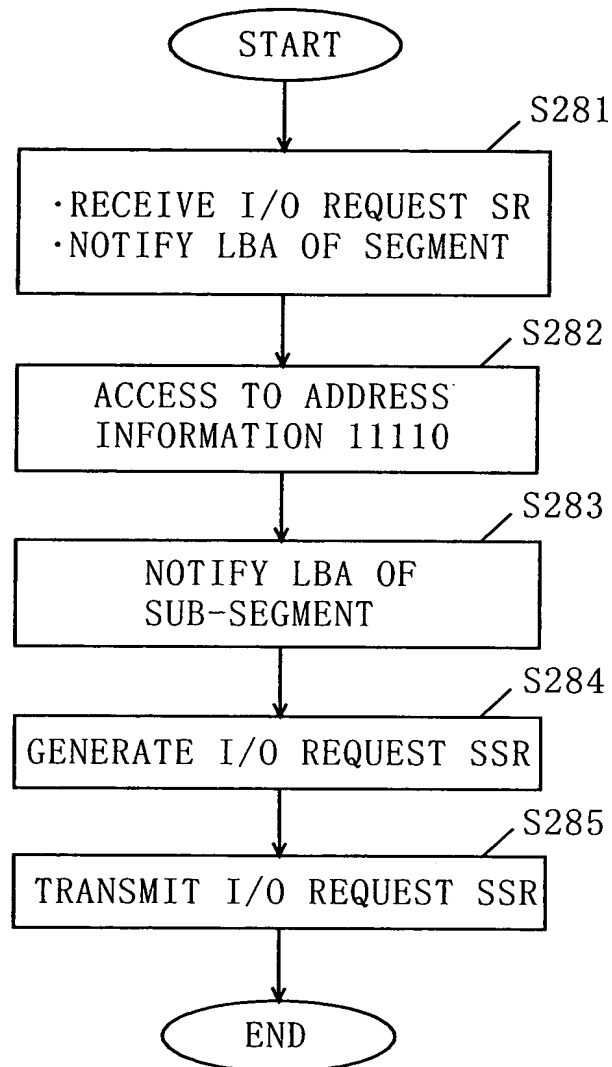


FIG. 65

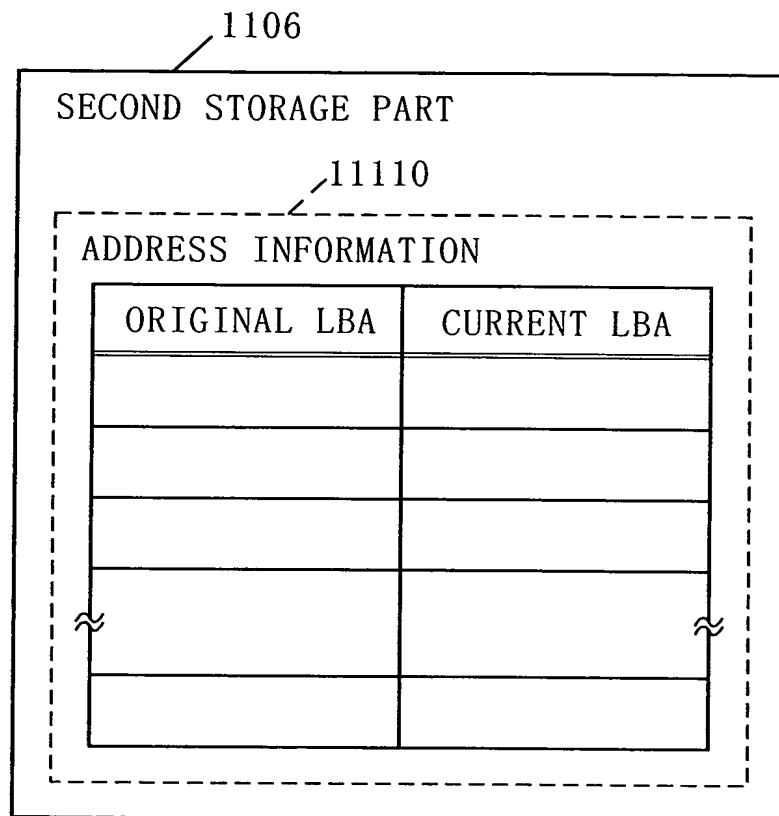


FIG. 66

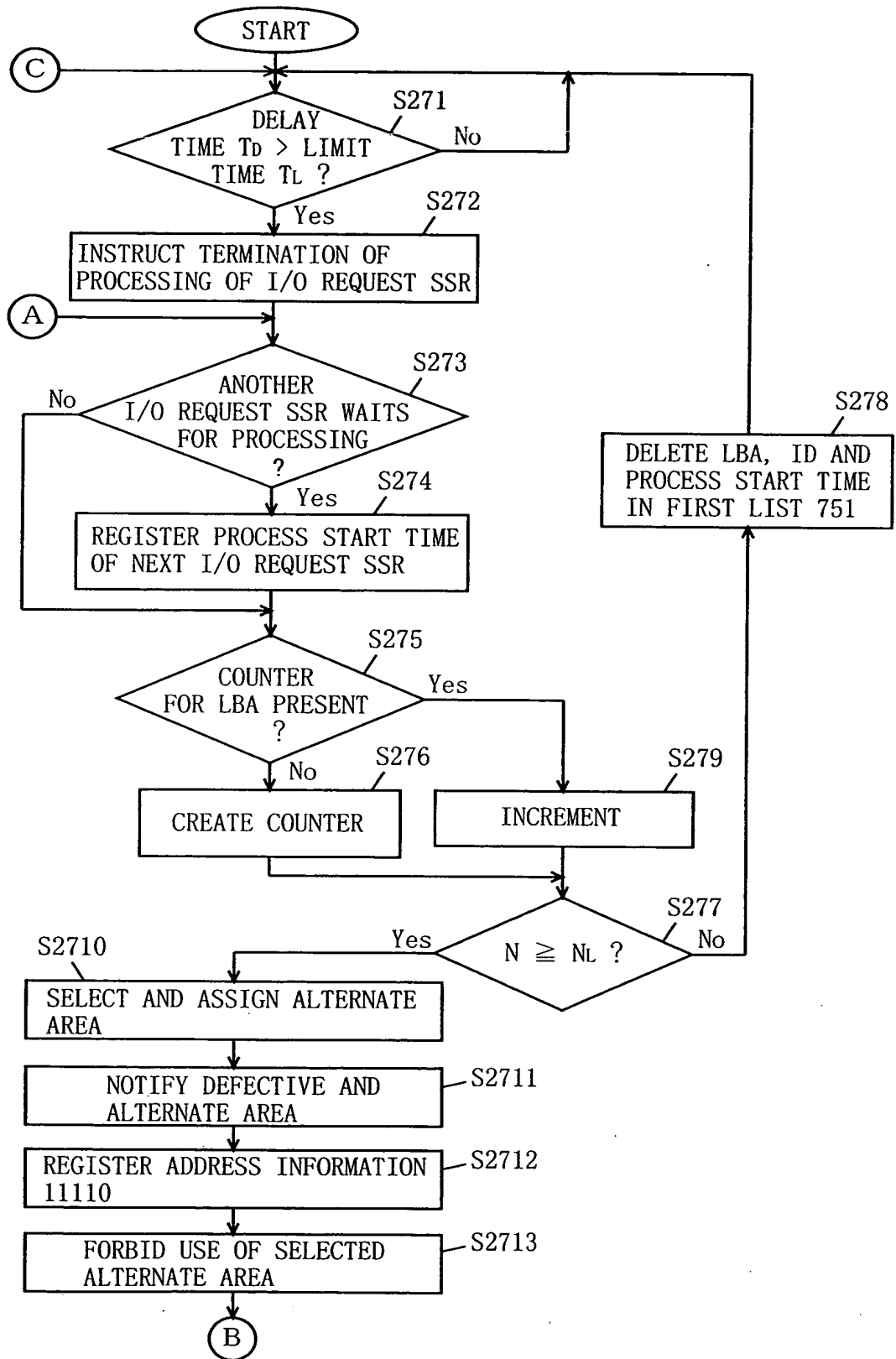


FIG. 67

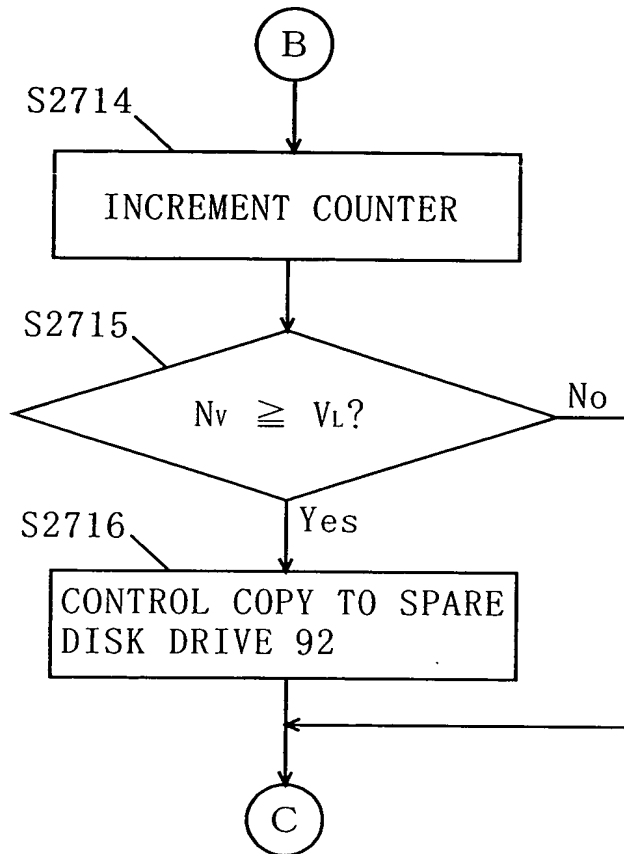


FIG. 68

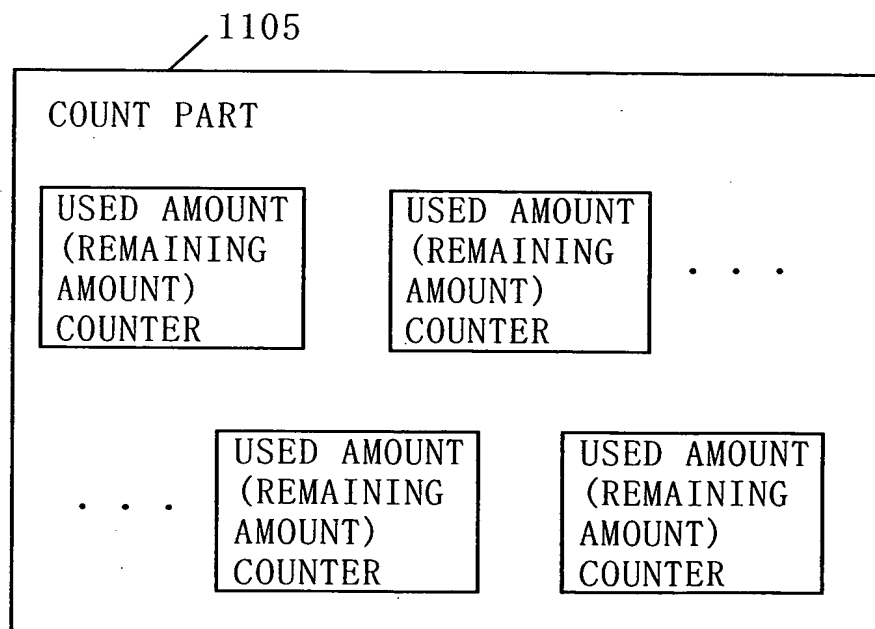


FIG. 69 PRIOR ART

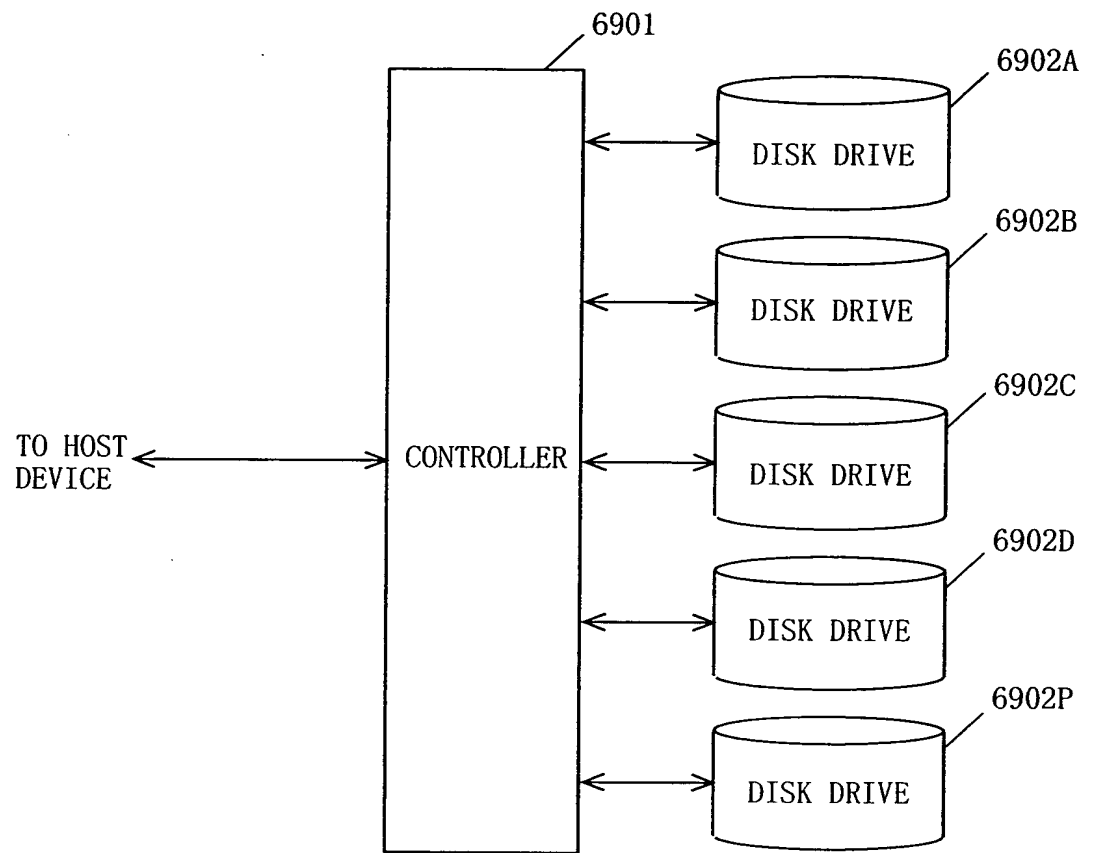


FIG. 70 a PRIOR ART

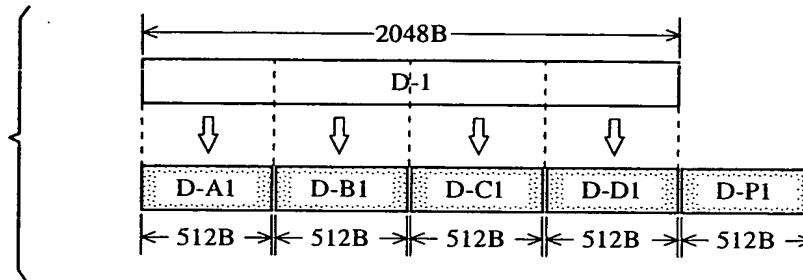


FIG. 70 b PRIOR ART

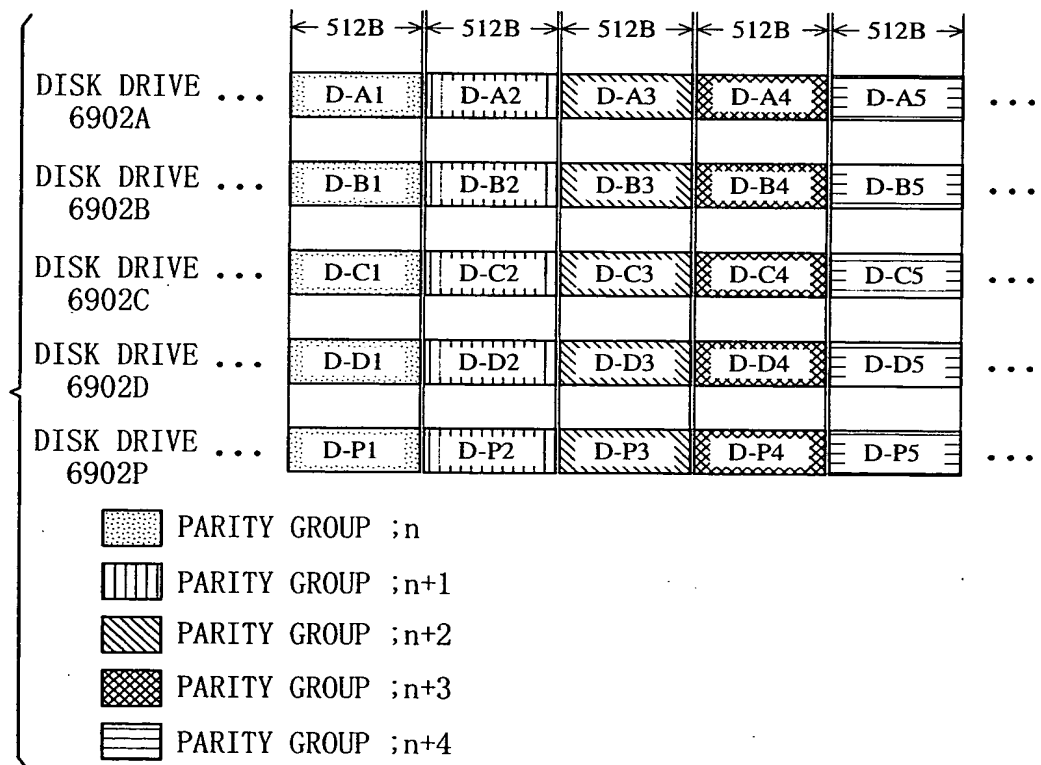


FIG. 71 a PRIOR ART

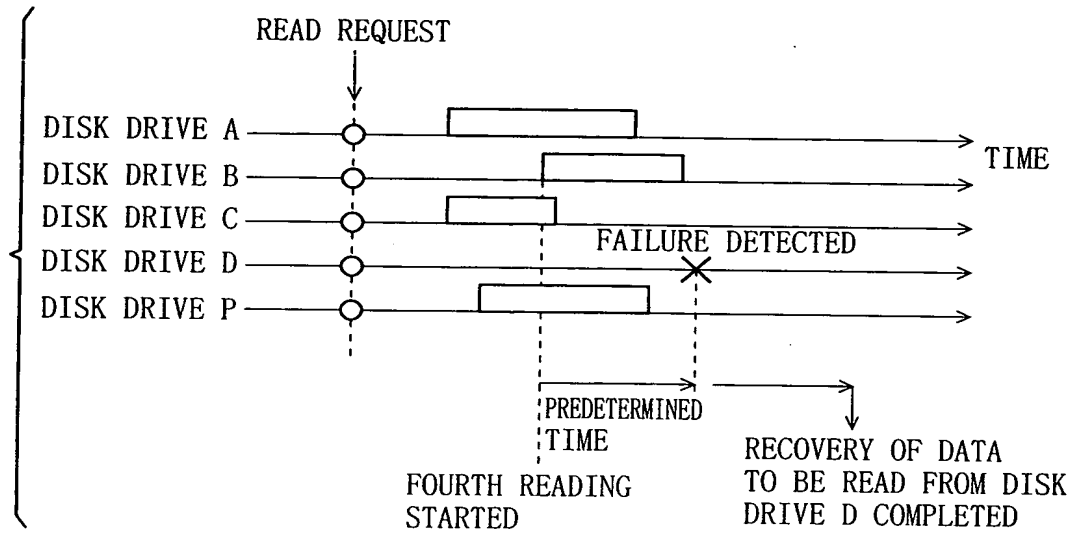


FIG. 71 b PRIOR ART

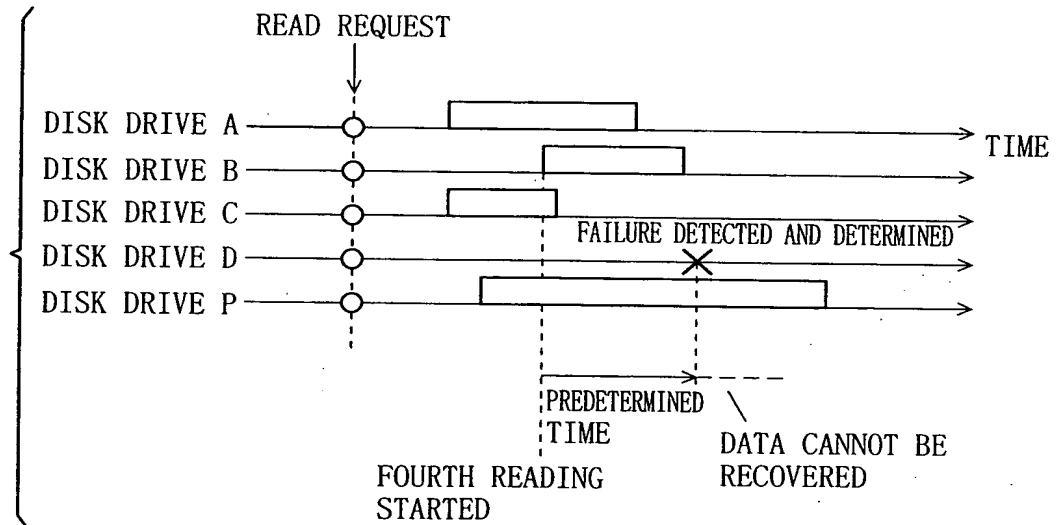


FIG. 72 a PRIOR ART

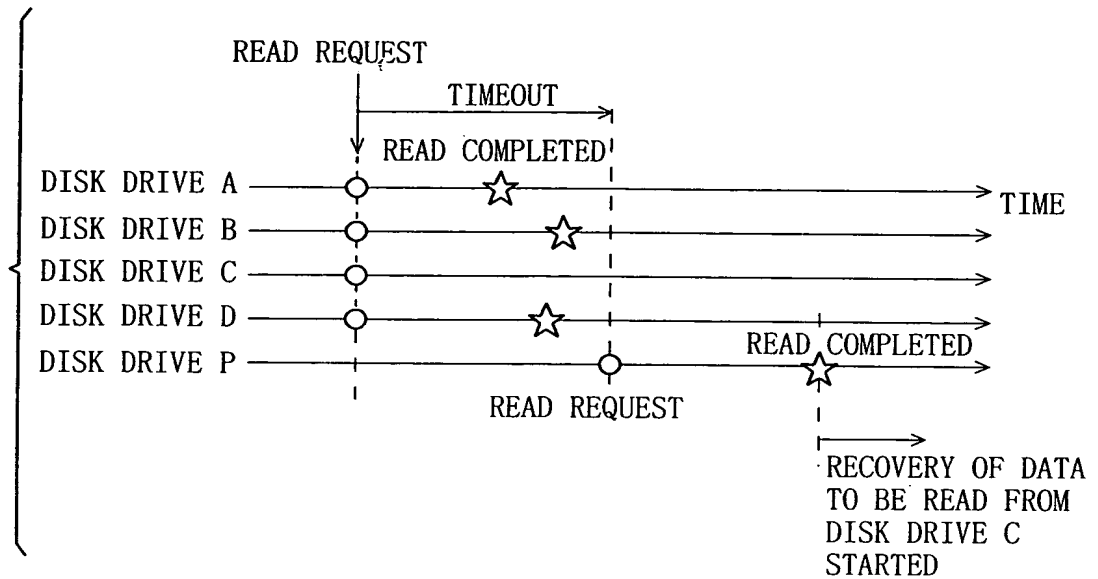


FIG. 72 b PRIOR ART

